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Reintroducing the Cirl Bunting to Cornwall

BBRC and Yellow Wagtails

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Front-cover photograph: Male Cirl Bunting *Emberiza cirlus*, Spain, April 2008. *Mike Lane*

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First UK recording:
2012

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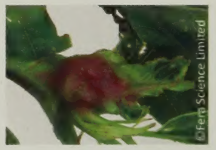
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Oriental chestnut gall wasp
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*The potential ecological impact of ash dieback in the UK. JNCC report No. 483.

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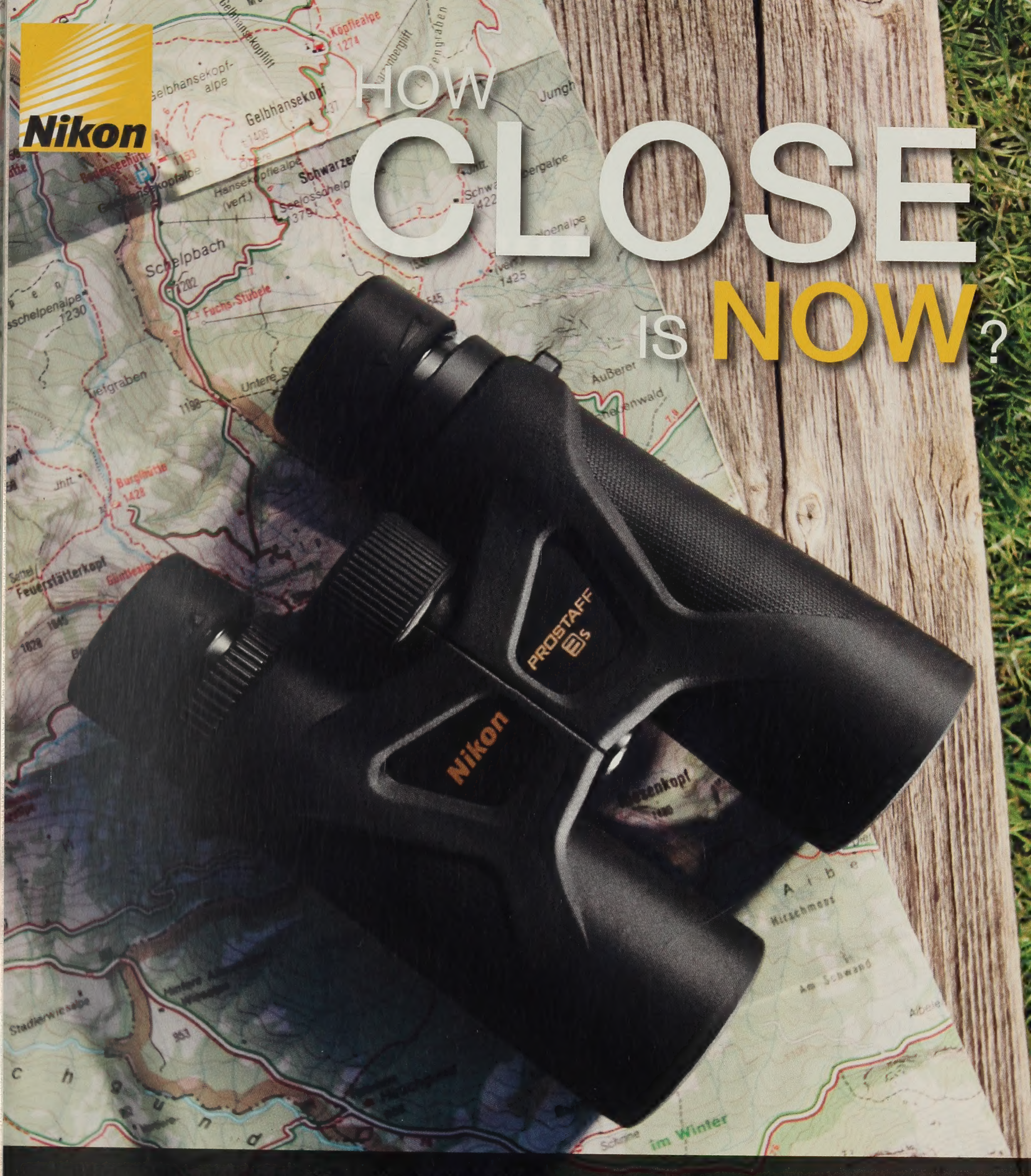

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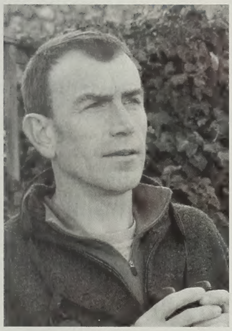

The first paper in this issue, on the reintroduction of the Cirl Bunting to Cornwall, shows the progress of our skills in dealing with situations where reintroductions are possible and appropriate. The fact that this is reckoned to be the first successful reintroduction of a passerine species in Europe makes it a particularly interesting story. Not all birders like the idea of reintroductions, but as long as the justification for the project is sound (and there are well-thought-out guidelines for making that decision) then it seems to me to be a pretty important tool to have in the conservation kitbag.

The other main paper in this issue is one for rarity hunters, setting out BBRC's approach to vagrant Yellow Wagtails, in all their various and generally splendid forms. In this article, we've worked closely with BBRC to add extra value to the text. Various extra elements are available online, both through our own website and through a welcome partnership with The Sound Approach (www.soundapproach.co.uk). This extra information is available to readers of the paper and digital versions of *BB* alike, although the latter have an easier task, having only to click on a link, whereas readers of the paper version will have to type the relevant URL into their browser. The digital platform offers magazines enormous extra potential beyond the confines of the printed page, and this is something that *BB* readers are set to benefit from more and more.

Roger Riddington

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The Next Generation

It's a question we've all got used to hearing over the years: 'Where have all the young birders gone?' Well, I've got news for you – they're back!

So did they ever go away? I believe they did. For many years, young people in their teens and early twenties seemed to have gone AWOL from the birding scene. When out birding, we'd encounter lone males, couples, families and whole groups – but rarely, if ever, a couple of youngsters out on their own. As Chris Packham has pointed out, the unaccompanied child is now a rarity in the countryside.

But things do now seem to be changing. At Birdfair, on the Saturday evening outside the beer tent, there are crowds of young people swapping stories, chatting with the older generation, and enjoying being part of a new cohort of birders, naturalists and conservationists determined to change the world for the better.

They make me feel both old and young at the same time – old, because some are even too young to recall my TV series *Birding with Bill Oddie* in the late 1990s; young, because of their infectious enthusiasm and great company.

Many of them belong to one or both of two thriving new organisations, each dedicated to encouraging young people's interest in wildlife. Next Generation Birders (NGB) and A Focus on Nature (AFoN) have both been instrumental in engaging young people with the natural world, and offering them practical help, support and advice. I have mentored several members of AFoN, and – although it may be a cliché to say so – I have learnt at least as much from their enthusiasm and engagement as they have from me.

This generation have forgotten more about new technology and social media than I'll ever know. They write blogs, post photos and videos, and generally take every chance they can to communicate their passion for birds – and other wildlife – to the widest possible audience. Their urge to change the world for the better reminds me of a much earlier generation – the children of the 1960s. Gone is the cynicism and ennui of the late twentieth century, to be replaced by a determination to make a real impact on the world of conservation.

So it's hardly surprising that many of these younger birders are beginning to make their mark in the media, too. Lucy McRobert, who founded AFoN, has a regular column in *Birdwatch* magazine, in which she's not been afraid to take on some sacred cows, and slaughter them very effectively indeed. Not to be outdone, *Birdwatching* recently ran a 16-page supplement on young birders, which revealed how much this generation engages with everything from bird ringing and wildlife film-making to hands-on conservation.

What a contrast with the situation just a few years ago. In 2012, I wrote the *Natural Childhood* report for the National Trust. This focused on a mounting body of evidence that showed that children had, over a period of decades, become progressively disengaged from nature, and lost the freedoms my generation took for granted when we were growing up. The consequences of this disconnection permeate every aspect of our society: from our physical, mental and emotional health to the way social networks are formed and maintained.

This problem has certainly not gone away: many of Britain's children are still denied regular access to the great outdoors, with all the negative consequences this brings. But I now have faith in these young people who, through their own determination and creativity, have managed to engage with nature on so many levels. They represent a sea change in society – now all we have to do is listen to them.

A recent AFoN conference, A Vision for Nature, was a fine example of the practical ways in which this new generation can make a difference, by aiming to influence environmental and conservation policies in the future. After all, it's in their interest to do so – who wants to live in a world without birds?

One of the most prominent young

birders, Findlay Wilde, recently asked me to contribute to his '13 Years Wilde' blog. He was encouraging older birders to recall what life was like when we were his age – in my case, more than 40 years ago, in 1973. As I did so, memories came back of my first, unforgettable visits to Cley and Minsmere, and trips to my old local patch – Staines Reservoirs on the western edge of London.

Kay Moss

205. Stephen Moss, aged about nine, feeding sparrows in St James's Park, London.

But as I wrote that blog, what really struck me was the lack of contact I had with my fellow birdwatchers (as we were called in those far-off days). Apart from my old friend Daniel, with whom I still go birding today, I didn't know any other birders throughout my teenage years, and indeed well into my twenties. Older birders – almost all men – were both patronising and unhelpful, as David Lindo recalls in his entertaining memoir *The Urban Birder*. And while the monthly arrival of *British Birds* represented a small ray of light in the darkness, there were few if any opportunities for my generation to engage in the broader development of birding and conservation.

The other really positive thing about birding today – and indeed all wildlife watching – is that it has suddenly become, if not exactly 'cool', at least mainstream. Many celebrities, ranging from Oscar-winner Nick Park to actor Alison Steadman, and comedians Vic Reeves and Rory McGrath to America's leading literary novelist Jonathan Franzen, now enjoy birding. Birding has become 'rock-n-roll' – literally so in the case of Elbow's Guy Garvey, British Sea Power's Martin Noble, Doves' Jimi Goodwin and the Guillemots' Fyfe Dangerfield.

How different from my day, as shown by this lovely anecdote written by my contemporary Mark Cocker in his book *Birders: tales of a tribe*:

'I often rehearsed a nightmare scenario in which a large gang of girls stood in a scornful huddle laughing at the nerd with the anorak and the binoculars.'

And then he delivers the killer line:

'I don't know why I should have had that particular fantasy. At that age I didn't even know any girls.'

For young birders today, this kind of embarrassment simply isn't an issue any more. As one told me: 'I was the only birder in my school, but it didn't matter – I just went onto Facebook and found half a dozen others in my local area.' Social media has allowed young naturalists to get – and stay – in touch with one another; to organise events and field trips, swap information, photos and videos, and, as we've seen, create entire organisations designed to further their cause.

So I am optimistic that this is no flash in the pan – and that, as these young birders head towards middle age, they in turn will encourage and mentor new generations to follow in their footsteps. For birders of any age, from eight to 80, that has to be good news.

Stephen Moss

Stephen Moss is a writer and broadcaster who lives in Somerset.

News and comment

Compiled by Adrian Pitches

Opinions expressed in this feature are not necessarily those of *British Birds*

National Trust revokes grouse moor lease

The National Trust has been widely praised for revoking a shooting tenant's lease after an armed man in camouflage gear was filmed crouched beside a Hen Harrier *Circus cyaneus* decoy on a Peak District grouse moor. You can see the footage – digiscoped by birders seeking a reported ringtail Hen Harrier in February this year – here: https://raptorpersecutionscotland.wordpress.com/2016/04/26/faking-it/

The current shooting leases at Hope Woodlands and Park Hall in Derbyshire will end in April 2018. The charity said that it had taken the decision to exercise a break clause in the lease to end the relationship four years early. Andy Beer, NT's Director for the Midlands, said: 'We have a clear vision for land management and wildlife restoration on the High Peak Moors, which was developed in full consultation with our tenants and other key stakeholders.

'All our tenants have signed up to deliver that vision and understand their responsibilities. We work very closely with our tenants and support, consult and discuss any issues relating to the plan on a regular basis. However, in this case we have decided, after a meeting with the tenant, that we should revoke the lease four years early as it became clear that we could no longer have confidence that they were committed to the delivery of our vision for the land.'

(It will come as no surprise to observers of the conflict between game-shooting interests and raptors that the man managing the moorland – and who failed to share the NT's vision for their land – was Mark Osborne. Just google him.)

Andy Beer continued: 'We have given the tenant 22 months' notice and will start the process of looking for a replacement in 2017, when we will be happy to receive applications from partners who can demonstrate how moorland management and shooting can deliver great nature conservation in a way that is compatible with public access.

'We remain committed to the High Peak Moors Vision. As with all our conservation aims, we review and evaluate progress periodically. When considering renewals of individual shooting leases in future we will take into careful account the extent to which our objectives have been met, *in particular relating to increasing raptor populations.*'

Weeping copious crocodile tears, the chairman of the Moorland Association, Robert Benson, said: 'The Moorland Association is very sad that the National Trust has taken the decision to terminate a sporting lease early. This is the result of a breakdown in confidence in the current tenant's commitment to the delivery of NT's vision.' There was no mention of terminating the tenant's membership of the Moorland Association, though.

Mark Avery's e-petition to ban driven grouse shooting has now amassed 42,000 signatures. You can sign it here: https://petition.parliament.uk/petitions/125003

Outrage as grouse moor gamekeeper let off with a caution after setting pole traps

A gamekeeper who set three barbaric pole traps where a Hen Harrier had been seen hunting was given only a caution by North Yorkshire Police, granting him anonymity. Pole traps were outlawed in 1904, 50 years before the first Protection of Birds Act, so the RSPB Investigations team was astonished to receive a call from a walker in the Yorkshire Dales National Park reporting three of them set on a grouse moor managed by the Mossdale Estate. The team tells the story on the RSPB website (including video footage): www.rspb.org.uk/community/ourwork/b/investigations/archive/2016/06/01/proceed-with-caution.aspx

Andy Hay/rspb-images.com

206. Male Hen Harrier *Circus cyaneus*, Islay, Argyll, June 2002.

'On Friday 6th May, a member of the public reported finding three spring traps set illegally in the open on isolated posts about 100 m apart. These were at a remote location along the north side of Widdale Fell, on the Mossdale Estate near Hawes, North Yorkshire.

'Particularly concerning was that a Hen Harrier had been sighted the same morning, hunting on the fell a short distance away. The finder made two of the traps safe and reported the matter to the RSPB. RSPB investigators attended that same day and installed covert cameras on two of the traps. The safety catch was put in place on the remaining (set) trap to prevent it catching anything. Returning on the evening of Monday 9th May, [they] discovered that all three pole traps had been reset. The covert footage earlier that day showed an individual taking the safety catch off one trap and resetting another.

'RSPB investigators made the traps safe and reported the matter to the police. Wildlife Crime Officers from North Yorkshire Police attended with RSPB the following day and recovered all three unset traps. Two of the traps had small feathers adhering to the jaws, suggesting they may previously have caught birds. An individual was later interviewed by the police and accepted responsibility for setting all three traps. He received an adult caution.'

Bob Elliot, Head of RSPB Investigations, said: 'These [traps] are dreadful, barbaric devices and have no place in the twenty-first century. North Yorkshire has long held the unenviable reputation of being the worst county in England for raptor persecution. The sighting of a Hen Harrier in the immediate area is of particular concern. This species is nearly extinct as a breeding species in England and it last bred successfully in North Yorkshire in 2007, despite huge areas of suitable habitat.

'Earlier this year, Defra launched its Hen Harrier Action Plan, which has been supported by shooting organisations. Yet again, we have seen that there appears to be little sign that birds of prey will be tolerated in our uplands.

'These crimes are extremely difficult to investigate. Whilst we are grateful for the excellent police response in attending this incident, we simply do not understand the decision to issue [just] a caution for such a serious case. The UK Government has set raptor persecution as one of the national wildlife crime priorities. To create a meaningful deterrent we believe there needs to be zero tolerance of serious crimes of this nature.'

This was the response from North Yorkshire Police: 'The investigation led the suspect, a 23-year-old man from the Hawes area, to go to Richmond Police Station as a voluntary attendee on 22nd May. He made a full and frank admission to using the illegal spring pole traps near Widdale Fell, which were initially reported to the police by the RSPB, who had obtained video evidence of the offence. All options in how to deal with the man were considered, including a prosecution at court. However, based on the case at hand, it was decided the most appropriate course of action was to give him an adult caution.'

Moorland Association director Amanda Anderson said: 'The MA has formally reviewed the incident on Mossdale Estate where an underkeeper admitted to setting traps illegally. The keeper is no longer employed by the estate. Mossdale has also resigned its membership of the MA.'

Egg-collectors raid Mediterranean Gull colony – for the restaurant trade

Mediterranean Gull *Larus melanocephalus* eggs from Poole Harbour, in Dorset, are being sold to top restaurants for consumption, despite the practice being highly illegal and no knowledge of whether the eggs are safe to eat.

The discovery was made when local charity, Birds of Poole Harbour, was carrying out a survey in early May on the 'Gull Islands' in Poole Harbour, which have been breeding grounds for the much commoner Black-headed Gull *Chroicocephalus ridibundus* for many years. The Mediterranean Gull, a recent colonist, is a Schedule 1 species, which means that it has the highest level of protection under the Wildlife and Countryside Act, and that it is illegal to interfere with its nests or eggs. During the survey the large number of human footprints and quantity of empty nests made it very clear that the islands – which have historically held up to 9,000 pairs of Black-headed Gulls and more recently up to 100 pairs of Mediterranean Gulls – had fallen victim to the practice of egging, when Black-headed Gull eggs are taken for sale to UK restaurants.

Paul Morton, from the Birds of Poole Harbour charity, said: 'Black-headed Gulls and Mediterranean Gulls look very similar, and their eggs even more so. And when eggers go out to the islands in the dead of night to harvest the eggs, the nests of the two species are so tightly packed together that there is absolutely no way of knowing which eggs are being swiped. Also, restaurants will have no idea that they may be selling the eggs of a Schedule 1 species, putting them at risk of prosecution'.

Black-headed Gull eggs are collected legally under licence from Natural England at restricted locations around Britain, yet there is strictly no egging permitted in Poole Harbour. The eggs taken elsewhere by licensed collectors end up in some of the country's top restaurants but, with only 18 people in the south of Britain licensed to collect Black-headed Gull eggs, there is clearly a black market for the product.

Paul Morton again: 'There are several causes for alarm here. Firstly, there is absolutely no licensed egging in Poole Harbour, so collection of any eggs is illegal. Secondly, although the selling and eating of Black-headed Gull eggs is well known, there has been no testing of Mediterranean Gull eggs from the UK to see whether they are safe for human consumption. Not only that, but if eating establishments are selling eggs labelled as one thing but they're actually something else, I assume they could be in breach of trade and standards laws. My advice to any restaurant currently selling gull eggs is to ask their supplier if they're 100% sure of the origin of their eggs.'

It's currently not known where the eggs from Poole Harbour are being sold but the police have been informed to help get investigations under way.

'Team Rat' leader is named Conservationist of the Year

Tony Martin, professor of animal conservation at Dundee University, was recently awarded the title 'Conservationist of the Year' from the Zoological Society of London. Prof. Martin leads the South Georgia Heritage Trust, which seeks to reverse two centuries of damage to the south Atlantic seabird sanctuary by rats. Eradicating the rats would allow an estimated 100 million seabirds to recolonise the archipelago and save the South Georgia Pipit *Anthus antarcticus*, endemic to South Georgia, from extinction.

Prof. Martin said: 'I am immensely proud to receive ZSL's Conservationist of the Year award, and do so on behalf of the many people who contributed to this landmark project. It was a privilege to lead such a remarkable team of people, "Team Rat" as we became known, on this breathtaking sub-Antarctic island. It's gratifying that there are already signs of recovery on South Georgia, thanks to our combined efforts.'

Monitoring work has indicated that the first phase of baiting the rats was successful. A large survey at the end of 2017 will assess whether the areas baited during the second and third phases were similarly effective in removing every single rodent.

Arctic Tern clocks up record air miles

An Arctic Tern *Sterna paradisaea* has completed a 96,000-km round trip from the Farne Islands in Northumberland to Antarctica – the longest recorded migration of any bird, ever.

Last summer 29 birds were fitted with geolocators by researchers from Newcastle University, and filmed by BBC *Springwatch*. When the terns returned to the Farnes in May, allowing the research team the chance to retrieve the geolocators, one bird was found to have made a 96,000-km round trip between Northumberland and its winter home in the Weddell Sea, in Antarctica. Seemingly, this is the longest flight ever recorded for a migratory bird, with the previous record held by an Arctic Tern

Roger Riddington

207. Arctic Terns *Sterna paradisaea*, Shetland, May 2016.

from the Netherlands, which had made a 91,000-km round trip to its wintering grounds and back.

'It's really quite humbling to see these tiny birds return when you consider the huge distances they've had to travel and how they've battled to survive,' said Richard Bevan of Newcastle University's School of Biology. So far we've managed to catch 16 of our tagged birds from last year and we've seen at least another four birds with our geolocators attached.

'We have been able to track our record-breaking Arctic Tern as it flew down the Atlantic coast of West Africa, crossed into the Indian Ocean and eventually arrived in Antarctica. Further analysis of the data from these trackers will allow us to get a better understanding of how the Arctic Terns organise their migration and how global climate change may affect their routes.'

Fresh hope for the Spoon-billed Sandpiper

One of the world's rarest birds has new hope, having laid eggs in captivity for the first time. At the time of writing, seven eggs have been laid this spring by two Spoon-billed Sandpipers *Calidris pygmaeus* at the Wildfowl & Wetlands Trust (WWT) HQ at Slimbridge, Gloucestershire.

The captive flock at Slimbridge was established in 2011 as a back-up in case conservationists run out of time to save the wild population from extinction. In the wild, only around 200 breeding pairs are left on the Asia Pacific coast, following declines of up to 25% each year.

WWT Head of Conservation Breeding Nigel Jarrett said: 'For the last two years – ever since all the spoonies came into maturity – we've been doing everything short of playing Barry White to get these birds in the mood for love. And for two years we've come up scratching our heads and feeling a bit deflated. So when we found the first egg last week we almost couldn't believe it.

'We've done our best to recreate [the conditions the birds experience on their migration, from tropical Asia to Arctic Russia] in aviaries in Gloucestershire. I'm glad to say that, with the help of special light bulbs and timer switches, along with a lot of sand and netting, we seem to have finally pulled it off.'

WWT will have to wait for the embryos to develop before they can find out how many of the eggs might be viable.

A full update on the progress of this extraordinary project will appear in *BB* later this year.

Dawn Balmer appointed as first female member of BOURC

Congratulations to *BB* Editorial Board member Dawn Balmer on her appointment to the British Ornithologists' Union Records Committee, the keepers of the British List. Dawn is the first female member of BOURC in its lengthy history but her appointment is no surprise to anyone who has worked alongside her at *BB* or the BTO. Or indeed to anyone who has shared a hide with her when she's meticulously picking out a second-winter Caspian Gull *Larus cachinnans.*

Dawn has been a keen birder since childhood and a trained ringer for over 20 years. Having worked for the BTO since 1992, on a wide range of census, fieldwork, ringing and bird-recording projects, she was the Atlas Coordinator for *Bird Atlas 2007–11* and is now Head of Surveys. Dawn also represents BTO on the Rare Breeding Birds Panel. In her 'spare time', she is Secretary of the *BB* Editorial Board, is a Trustee of the Eric Hosking Charitable Trust and writes regularly for *British Wildlife.*

The other new appointment to BOURC is the equally well-respected Andy Stoddart, Vice-Chairman of BBRC. Like Dawn, Andy is a lifelong birder – and also a resident of Norfolk. He's widely travelled but is most at home on his local patch of Blakeney Point. He has written four books on ornithological and environmental history and is a frequent contributor of papers, articles and book reviews to the birding press. He's also editor of the *Norfolk Bird Report* (www.nnns.org.uk/content/bird-mammal-report).

Dawn and Andy will have a full in-tray at BOURC – not least with the records of those recent west-country wanderers, Dalmatian Pelican *Pelecanus crispus* and Lammergeier *Gypaetus barbatus.* Or should that be 'Bearded Vulture *Gypaetus barbatus*'? Roy Dennis wrote in to N&c suggesting that we should change our use of the name Lammergeier – or 'lamb killer' – which is of course a complete misnomer, and a reason why mainland Europeans are not keen on the name. We'll add this to the list of English names to review at the end of the year.

For extended versions of many of the stories featured here, and much more, visit our website www.britishbirds.co.uk

Reintroducing the Cirl Bunting to Cornwall

Cath Jeffs, Mary Davies, Ian Carter, Jo Gregson, Anthony Sainsbury and Janet Lister

Abstract A pioneering project to reintroduce the Cirl Bunting *Emberiza cirlus* was carried out on the Roseland Peninsula in southern Cornwall between 2006 and 2011. It involved the captive rearing and release of 376 young birds, taken from nests in south Devon. A breeding population is now established in the release area and at least 52 pairs were present in 2015. With further targeted habitat management through agri-environment schemes it is hoped that the population will continue to increase and spread into the surrounding landscape. This paper describes the development of the work, from the initial planning stages, through to the adaptive management required to help to ensure that it was ultimately successful. Working with a small passerine requires a rather different approach from that for the larger, more robust, species that are more familiar as subjects for reintroduction. The lessons learnt may be useful for future projects involving the translocation of small passerines in Britain or farther afield.

Introduction

The Cirl Bunting *Emberiza cirlus* was once widespread and locally numerous in farmland habitats across southern England but the population declined markedly in the twentieth century. Only 118 pairs were recorded in a complete survey in 1989, nearly all of which were in south Devon (Evans 1992).

Since then, a species recovery project has resulted in a substantial turnaround and the most recent survey, in 2009, estimated that there were 862 pairs of Cirl Buntings (Stanbury *et al.* 2010). This recovery has been hugely encouraging, in terms of both an increase in numbers and a modest expansion and consolidation of the breeding range. However, owing to the species' sedentary nature and a barrier of unsuitable habitat around its south Devon stronghold, significant range recovery into formerly occupied areas of southern Britain seemed unlikely to occur unaided, or at least would be extremely slow. This led to concerns over the potential impact of an unexpected event, such as a spell of severe winter weather, on such a localised population. To improve the conservation status of the species it was felt that establishing a geographically separate population was desirable. Consequently, RSPB and Natural England assessed the feasibility of establishing another self-sustaining population of Cirl Buntings through translocation to a new area.

Assessment of potentially suitable release sites began in 1997 and release techniques were trialled. After several years of planning, the Cirl Bunting Reintroduction Project began in earnest and, in 2006, the first of six years of releases were undertaken on the Roseland Peninsula in Cornwall. Post-release monitoring has shown that the project has been successful with over 50 pairs recorded in 2015. Breeding productivity has been good and winter survival rates are high, suggesting that the population has a good chance of continued increase in the coming years.

This paper describes the approach taken during this pioneering reintroduction project, the first successful reintroduction of a small passerine in Europe. It summarises the methods used and some of the key lessons learnt.

Cath Jeffs/RSPB

208. The rolling landscape and mixed farming habitats of the Roseland Peninsula, Cornwall, July 2014.

Historical status and reasons for decline

The Cirl Bunting population in Britain has undergone significant changes over the past 200 years. It was first described by Montagu near Kingsbridge in Devon in the winter of 1800 and he found it breeding nearby the following summer (Montagu 1833). Southern England was colonised gradually during the nineteenth century, with the bird spreading into many English and Welsh counties; occasional breeders were reported as far north as Cumbria (Brown & Grice 2005). The population was at its peak between the late 1800s and the 1930s, but Cirl Buntings were at best only locally numerous and tended to be most abundant in coastal areas (Brown & Grice 2005). However, Cirl Buntings were reportedly more common than Yellowhammers *E. citrinella* in parts of Gloucestershire (Mellersh 1902) and the North Downs (Ticehurst 1909). The species was often recorded around farmsteads and in villages where suitable feeding and nesting habitats were available in close proximity (Wilson *et al.* 2009).

The Cirl Bunting went into steady decline sometime after the 1930s, and by the mid 1960s numbers had collapsed across the majority of its British range (Parslow 1968; Sitters 1982). This trend continued, leaving small groups and isolated pairs throughout the former range. There were just 250–300 pairs recorded in 20 counties during 1968–72 (Sitters 1982) and by 1989 the 118 pairs were found in just three counties with over 96% of the population concentrated in south Devon (Evans 1992). The last remaining breeding pairs in Cornwall and Somerset were lost in the 1990s leaving the entire British population restricted to a strip of coastal farmland between Plymouth and Exeter.

Research conducted during the late 1980s and early 1990s indicated that this decline was associated with changes in the farmed landscape that resulted in the loss of essential feeding and breeding habitat. The following broad factors were implicated:

- **Lack of winter food** The shift from spring-sown to autumn-sown cereals from the 1960s onwards, together with an increased use of herbicides, resulted in far fewer weedy arable fields being left as stubble during the winter (Wilson *et al.* 2009). This created a significant food shortage at a crucial time of year for Cirl Buntings and many other granivorous birds (Evans & Smith 1994).
- **Lack of summer food** In summer, grasshoppers are an important food source for chicks, especially later in the season, and breeding success is closely linked to their availability (Evans *et al.* 1997). Grassland intensification, including reseeding of pastures, the use of inorganic

fertilisers and the switch from hay to silage, has dramatically reduced grasshopper abundance.

- **Nesting sites** During this period hedgerows were often removed or mismanaged, which led to a reduction in scrubby, bushy hedges essential for nesting sites and winter cover (Evans 1997).

These factors were exacerbated by the essentially sedentary nature of the Cirl Bunting. The species could thrive only if all the habitats required to meet its needs throughout the year were available within a small area, essentially at the farm scale. The trend for farms to specialise resulted in a reduction in mixed arable and livestock farms and a greater uniformity in local landscapes, which would have affected breeding success and/or winter survival rates in many areas.

The road to recovery

As a result of the research carried out in the late 1980s, trial management agreements were arranged with a number of key farmers within the core range in south Devon. These provided financial incentives to retain weedy overwinter stubbles. At around the same time, 'set-aside' became part of the EU Common Agricultural Policy as an arable production control mechanism, and effectively became compulsory from 1992, with the resulting fallows providing vital foraging areas for Cirl Buntings in winter (Buckingham *et al.* 1999). In 1991, Countryside Stewardship (CS) was introduced to improve the environmental value of targeted areas of England's farmed landscapes. As part of this measure the Countryside Commission championed a new option called *The Cirl Bunting Special Project*, which was to prove vital in the species' recovery. Together with prescriptions already available (such as tussocky grass margins around arable crops, cattle-grazed grassland, and hedgerow and scrub management), this allowed optimum land management for Cirl Buntings. Farmers were encouraged to enter into the ten-year agreements for this option, guided by advice from a dedicated RSPB Project Officer.

This targeted habitat provision produced spectacular results. Between 1992 and 1998, Cirl Buntings increased by 83% on land under management agreements, compared with a 2% increase on land outside agreements (Peach *et al.* 2001). Subsequent

Cath Jeffs/RSPB

209. Winter stubble is a critical resource for Cirl Buntings *Emberiza cirlus*; Cornwall, March 2014.

surveys showed that the population recovered to an estimated 450 pairs in 1998 (Wotton *et al.* 2000), 697 pairs in 2003 (Wotton *et al.* 2004) and 862 pairs in 2009 (Stanbury *et al.* 2010). The Countryside Stewardship agreements targeted at Cirl Buntings also had benefits for other wildlife, including other birds, insects and plants (Lock 1999; Bradbury *et al.* 2008; MacDonald *et al.* 2012).

Andy Hay/rspb-images.com

210. Cirl Bunting *Emberiza cirlus* chick at around seven days old.

Developing plans for reintroduction

Planning

Despite the population increase, by the early 2000s there was little corresponding expansion in range with the population consolidating within its existing range rather than expanding into new areas. This was due in part to the bird's sedentary nature but it was also thought that a barrier of unsuitable habitat around its south Devon stronghold would limit expansion and make recolonisation of the former range unlikely.

RSPB and Natural England first discussed the idea of translocation in the mid 1990s. As the plans progressed, other organisations became involved. Paignton Zoo Environmental Park was well placed to become the avicultural specialist, being at the heart of the Cirl Bunting's range in Devon. The National Trust, as the owners of land supporting around 18% of the Cirl Bunting population, and with land holdings across the former range, was also regarded as a key partner. The Zoological Society of London had expertise in health and disease monitoring of other reintroductions, and carried out a disease risk analysis for the proposed translocation.

Population source

There were a number of suggestions for the source of the birds to be released. One potential source was New Zealand, where Cirl Buntings were introduced with early human settlers, but the cost and logistics of transportation, not to mention concerns about genetic isolation, meant that this option was quickly discounted. Another possibility was France, although the species has declined in Normandy and moving birds between countries, even just across the English Channel, would have been logistically challenging and costly. The best option appeared to be the increasingly secure and robust population in Devon, provided that translocation would not affect the recovering population.

Reintroduction techniques

Three different approaches were considered: 1) capture-and-release of adult birds; 2) removal of chicks from nests to be reared then released after fledging (rear-and-release); and 3) establishment of a captive breeding population to provide birds for release.

Cirl Buntings are known to be sensitive birds to handle and there have been cases where capture for ringing has led to unexpected mortality (Andy Evans pers. comm.). The stress involved in capturing adult birds was felt to be unacceptable on both welfare and conservation grounds so this option was discounted at an early stage.

Establishing a captive population using wild-caught founder stock from Devon was initially appealing, since this would have a negligible impact on the wild population. However, there was little information available about keeping Cirl Buntings in captivity and none were known in existing collections. Indeed, rather ominously, they were described by early aviculturalists as somewhat delicate birds with a tendency to die in captivity (Bradburn 1891). In order to trial

Chris Townend/RSPB

211. The brooders for nestling chicks. Chicks that were taken from nests in Devon were kept warm in a brooder like this for about a week, until they were ready to fledge.

this technique, nine broods (25 chicks) were brought into captivity at Paignton Zoo Environmental Park in 2003. The survival of chicks to the fledging stage was high but there was subsequently high mortality of the juveniles and adults, with only 16 survivors by spring 2004. Failure of breeding attempts also indicated that the birds were not adapting well to captivity, and it was the view of avicultural staff that suitable breeding techniques would take a long time to develop before they could be used for a full reintroduction.

This left 'rear-and-release' as the remaining option, with chicks being removed from nests, hand-reared and then released after fledging. This had been initially discounted, due to concerns about the impact on the recovering Devon population. However, by 2003 it was felt that numbers – around 700 pairs – were sufficient to allow the collection of chicks. The Cirl Bunting is typically double-brooded throughout its range, and occasionally triple-brooded (*BWP*), readily relaying if a nest is lost. It was considered reasonable to take young from up to 20 nests a year (across several sites). This represented <1.5% of the total nest productivity, assuming those pairs went on to relay. Trials began in 2004 to examine this new approach and to develop hand-rearing techniques; test methods of release; assess survival rates of captive-reared birds; and determine whether hand-reared chicks can survive and recruit into a wild population. The trial also carefully assessed the impact of removing broods on the source population. Following the success of this work it was adopted as the preferred approach for the reintroduction (Jeffs 2005).

Receptor site assessment

The initial site assessment (Lock & St Pierre 1997) involved visiting a number of areas across southern Britain to assess their suitability as potential translocation sites. Selection was based upon the following criteria:

- Recent history (early 1970s or later) of Cirl Buntings.
- Environmental criteria should include mild winter weather but also predominant weather patterns different from those in south Devon – so that in the event of severe weather in south Devon, the release site would hopefully not be affected to the same degree.
- A minimum of five contiguous tetrads (2 km × 2 km) of suitable habitat.
- Suitable farming systems, with sufficient areas of low-intensity mixed farming.
- Sympathetic land ownership and the availability of incentives for habitat improvement and management.

Using these criteria, 17 potential release areas were assessed, of which the areas considered most favourable for translocation were east Devon, south Cornwall, the Tamar valley (coastal area only), the Isle of Wight, and the Mendips and the Polden Hills in Somerset. Most of the former range in south-east England was no longer considered suitable for Cirl Buntings as a result of major land-use changes. Climate change was felt likely to benefit Cirl Buntings at any of the sites across southern England but, at the time, there was no way of modelling its potential effects, so this was not one of the parameters considered.

Refining the initial analysis of potential

Cris Sellarés

212. Three Cirl Bunting *Emberiza cirlus* chicks in a brooder.

release areas, and disregarding sites adjacent to the existing Cirl Bunting range, the Isle of Wight was identified as a good potential candidate, with favourable conditions in the winter being a significant benefit there (Donald & Evans 2001). Following the rear-and-release trials in Devon, a final stage of site assessments took place in 2005. Seven release localities in four counties were shortlisted: the Roseland Peninsula and Looe in southern Cornwall; the Polden and Mendip Hills in Somerset; the Isle of Purbeck in Dorset; and the southwest and southeast portions of the Isle of Wight. Each of these was considered in more detail, including an exercise to map the extent of suitable habitat (current and potential) in each locality, based on features of occupied territories in south Devon. On this basis of habitat, only three areas could be expected to support sustainable populations – the Roseland Peninsula, the Isle of Purbeck and the southwest part of the Isle of Wight. Concerns about the ability to influence land management on a long-term basis led us to rule out the Isle of Wight at this stage while Purbeck had limited high-quality wintering habitat.

Eventually, the Roseland Peninsula was selected as the final release area, with the best prospects for supporting a sustainable population of Cirl Buntings in the longer term. Indeed, because the species had been recorded there in the 1990s, several farmers in the area already managed land to provide the full range of breeding and wintering habitat, including the vital winter stubbles. Although this came too late to prevent the loss of Cirl Buntings here, it turned out to be a significant benefit for the reintroduction project.

The release phase 2006–11

Having found a suitable release location on the Roseland (owned by the National Trust), and with a local farmer happy to host the release aviaries, the Cornish reintroduction project began in earnest in 2006.

A population model based on demographic parameters from the Devon population predicted that releasing 60 young birds each year over four years would result in a self-sustaining population of around 30 breeding pairs. This model was subsequently revisited when the population had not grown as expected by year four and, as a result, the release project was extended by a further two years. To ensure that 60 birds could be released, it was estimated that 75 chicks would need to be taken from the wild each year (to allow for pre-release mortality). This translated to 20 broods out of a conservative estimate of 1,400 produced annually at that time.

Disease risk analysis is a requirement of any reintroduction project (IUCN 2013) and in 2005 veterinary staff from the Zoological Society of London (ZSL) carried out this work for the Cirl Bunting project (McGill *et al.* 2005). The assessment concluded that hand-rearing should be carried out away from an existing zoo and that any staff involved in captive-rearing should not be in contact with exotic species. As a result, a dedicated facility was set up near to the release site, which also meant that the birds undertook their longest journeys as nestlings and at an age where stress was less likely to be an issue.

There were three main stages in the rearing process, as described below.

Stage 1: Chick removal

Three fieldworkers worked in ten donor areas with healthy Cirl Bunting populations and supportive landowners. The support of land managers was essential and if there were any concerns, these sites were not used. The nest-finders monitored territories across these sites and took chicks from selected nests when they were six days old. The whole brood was removed, to encourage the pair to relay. Only one brood was taken per pair and, where possible, pairs were monitored to assess whether they went on to breed again that season. Over half of all monitored pairs went on to breed successfully after their first brood was removed and at all the donor sites fledged broods outnumbered broods removed. Subsequent monitoring indicated that chick removal did not adversely affect breeding populations at the sites targeted, apart from two sites, where it was considered that habitat changes were a contributory factor – these sites were no longer used once a problem had been established.

Most broods were removed around midday or in the early afternoon, to ensure that they had already been fed by the adults that day. Before being transported they were usually ringed, with a BTO metal ring and a unique combination of three colour rings. Measurements, including weights, were also taken. In 2009, midway through one of the wettest summers on record, it was decided that only broods with chicks over 10 g would be removed, a policy that was continued in subsequent years. The aviculturalists found that chicks lighter than 10 g were more difficult to hand-rear, and subsequent analysis of release data found that chicks under 13 g (when removed) were statistically more likely to die after release than those over 13 g (Fountain *et al.* 2016). There may be a case for increasing the weight of chicks removed in any subsequent projects, though this could affect the number of chicks available for removal. The mean weight of chicks removed was 14.5 g (range 6.5–20.1 g before the 10 g minimum was introduced). In periods of wet weather, chicks were observed to grow more slowly and tended to look younger than they actually were, so they were not collected under such conditions. Slow growth during wet spells is well known in Cirl Buntings and is thought to reflect the increased difficulty of

Andy Hay/RSPB

213. Fledgling Cirl Buntings *Emberiza cirlus* being fed by Carl Laven, senior aviculturalist. When the chicks were old enough to be moved from the brooders (plates 211 & 212), they were housed in a canary cage. Individual broods were kept separate at all stages.

finding insect prey (Evans *et al.* 1997). Chicks were transported to the rearing facilities in Cornwall in an artificial nest within a small pet carrier. Travelling times were usually no more than 2–4 hours.

Stage 2: Rearing

Two aviculturalists were employed throughout the season and lived on site so that the birds were under 24-hour supervision. The facilities were housed in a National Trust property with one room given over to chick rearing and a barn for the older birds. Detailed husbandry guidelines were developed from experience during the trial and were further refined throughout the project (Sellarés & Maggs 2011). Rearing consisted of three stages: nestling, fledgling and pre-release. At each stage of the process, broods remained together and separate from other broods, with strict hygiene protocols and density limits as specified in the disease risk management protocol for the project. In the first two years, faecal samples were monitored intensively to provide baseline information on health and parasites. Post-mortem examinations were carried out on all birds that died. Nestlings were reared in brooders until they were around 15 days old. At this age they were increasingly active and ready to be moved to canary cages. Moving was considered stressful for birds and the hand-rearers were extra vigilant to identify any health issues. The young birds continued to be hand-fed in the canary cages but once they were feeding themselves and bathing (usually at about 21 days) they were moved to large aviaries at the release site.

Stage 3: Release

The release aviaries were the final stage of the rearing process. The aviaries were sited within suitable Cirl Bunting habitat in a sheltered position so that the young birds were afforded some protection from inclement weather. Branches were added to provide some structure.

As in the earlier stages, broods remained separate. Each aviary had one enclosed end with a shelf for a canary cage. The brood was transferred into these cages, where they remained for a day while they settled before being released into the main compartment of the aviary. The hand-reared birds were found to react to predators which, although desirable to aid learning, made it essential to provide good cover both within the aviary and on top of the roof to help the birds to feel secure and avoid injuries arising from panicked flight.

Although the hand-reared birds did not become imprinted on humans, once in the release aviaries, human contact was kept to a minimum and birds became increasingly 'wild'. At around 28 days old they were ready to be 'soft' released. A hatch on the front of the aviary was opened and remained open for a few days to allow birds to come and go from the aviary. Mesh netting was placed across the opening to allow the Cirl Buntings free access but to exclude larger predators. After release, food was provided in and near the aviaries for a period until the birds had learnt to forage for themselves in suitable habitat nearby.

Initially, the release aviaries were all at the same site in an effort to ensure that there were enough Cirl Buntings in one area to provide a focal point for a re-established population. However, Eurasian Sparrowhawks *Accipiter nisus* began to visit the release field regularly and it was felt that this might be having an impact on the survival chances of naïve, newly released birds. During 2009, various techniques to keep Sparrowhawks away were trialled, including the use of bird-scaring devices and increased human presence at the release site. These were not wholly effective, since the Sparrowhawks soon habituated to them. Providing a diversionary food supply to a local breeding pair of Sparrowhawks was also trialled in 2010, with some success. However, the most effective and practical measure proved to be changing release sites, both between and within years, as this ensured that the local Sparrowhawks did not become habituated to a source of freshly released young Cirl Buntings. All the release sites were within 2 km of each other, which is within the normal range of movements for Cirl Buntings.

Monitoring

All the released birds had unique colour-ring combinations so that information on survival rates, dispersal patterns and breeding

Andy Hay/RSPB

214. Once the Cirl Bunting *Emberiza cirlus* chicks were able to feed themselves, they were moved to outdoor aviaries where, after a night in the canary cage, they were allowed free rein of the aviary. After at least a week, a panel at the front of the aviary was removed and a cage attached to cover a release hatch that allowed the young buntings to leave but prevented predators from entering the aviary. Food was placed on top of the aviary, under the cage, to encourage birds to leave, and food was provided around aviaries throughout the release period. Here, Stuart Croft is checking on recently released birds in the vicinity; all sightings were used to build up a complete history of each bird.

success could be gathered. Since Cirl Buntings normally move 2 km or less between breeding and wintering areas (Evans 1992), the expectation was that the released birds would stay fairly local to the release site. A full-time RSPB field officer was employed during 2006–15, assisted by many volunteers, which allowed all suitable habitat around the release site to be regularly checked for colour-ringed birds.

Over the course of the project and as the population established, monitoring protocols were refined and standardised. During the summer the main aim was to locate and monitor all breeding pairs and non-breeding individuals by surveying all suitable, accessible sites within 500 m of known records. Breeding productivity was recorded where possible, while keeping disturbance to an absolute minimum. The decision was taken not to colour-ring chicks bred in the wild owing to previous problems with adults attacking rings placed on nestlings (Andy Evans pers. comm.).

In winter, all accessible winter foraging habitats (barley stubble, wild bird seed mix, supplementary feed areas (see later), horse/cattle feed areas, allotments/vegetable plots and farmyards), as well as known nesting territories, were mapped and grouped into discrete areas that could be monitored by a single, experienced surveyor in about half a day. All suitable areas within 2 km of the release site were surveyed at least once a week, while all other areas were covered once a fortnight (weather permitting). Additionally, a 'constant effort resighting' survey was undertaken based on reading colour-ring combinations in the areas within 2 km of the release site. These were surveyed every month, usually in a single day.

Table 1. Survival of released Cirl Buntings *Emberiza cirlus* in Cornwall, 2006–11.
Key: [1] released birds surviving 30 days following release; [2] number of birds surviving from 1st October to 1st April in the year following release; [3] total number of released birds surviving until 1st April in the year following release.

	no. released	no. alive after one month	no. alive on 1st October	no. alive on 1st April	% post-release survival[1]	% 1st-winter survival[2]	% overall 1st-year survival[3]
2006	72	57	47	29	79.2	61.7	40.3
2007	47	16	11	11	34.0	100	23.4
2008	68	25	24	17	36.8	70.8	25.0
2009	67	39	23	7	58.2	30.4	10.4
2010	70	40	31	18	57.1	58.1	25.7
2011	52	43	38	25	82.7	65.8	48.1
2006–11	376	220	174	107	58.5	61.5	28.5

Habitat management

Project staff worked alongside the local Natural England adviser to ensure that agri-environment schemes in the release area and beyond were tailored to the needs of Cirl Buntings. By the end of 2014, approximately 1,200 ha of land across ten farms were under sympathetic management.

To ensure that birds were not limited by food availability, supplementary feeding sites were set up in key areas. These provided a reliable additional source of seed throughout the year. They also provided a focal point for birds, which helped with the monitoring effort. Feeding sites were monitored carefully and moved if it was felt they had become a focus for avian predators. In addition, strict hygiene protocols were adhered to, in order to minimise the risk of disease transmission.

Results

During the six years of releases (2006–11), 376 chicks were reared and released successfully (83% of those taken from the wild). Mortality was at its highest during the first few weeks following release, which mirrors the situation among passerines in the wild (Cox *et al.* 2014). Over the six years of the project, post-release survival to at least 30 days averaged 58.5%, which compares favourably with the 55% predicted (based on data from the Devon population). However, this has varied considerably, from a low of 34.0% to a high of 82.7% (see table 1). Overwinter survival was relatively high and if birds survived until January/February of their first winter, they usually survived to the following summer and attempted to breed. This meant that winter stubble surveys undertaken between December and February provided a good estimate of the expected breeding population for the following season. Overall survival rates to May in the year following release were roughly as predicted before the reintroduction began.

Once released birds had survived their first year, survival rates tended to increase significantly. This was the case in all years apart from 2012 and 2013, when there were high levels of adult mortality in autumn. Following exceptionally poor weather during the 2012 breeding season, mortality among adult females was significantly higher than for adult males. This may have been the result of fatigue and stress during difficult breeding conditions, since females are responsible for a far greater share of breeding duties than males. The life expectancy of released birds that survived the initial post-release period was one year and four months, so the majority of these individuals live through only one breeding season. However, a handful of the most successful birds have lived for over five years and have bred in all five seasons (see table 2).

Table 2. Survival rates of released Cirl Buntings *Emberiza cirlus* with age.

	no. birds in breeding population (%)
1st season after release	87 (50%)
2nd season after release	46 (26.4%)
3rd season after release	18 (10.3%)
4th season after release	8 (4.6%)
5th season after release	1–3 (0.6–1.7%)

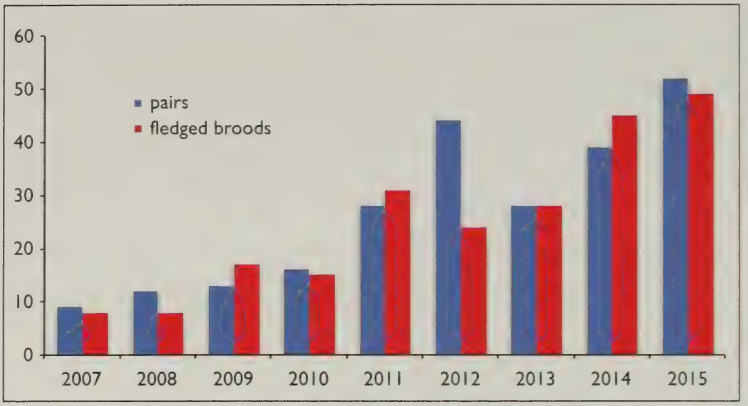


Fig. 1. Numbers of breeding pairs and fledged broods of Cirl Buntings *Emberiza cirlus* in Cornwall, 2007–15.

The first breeding in the wild occurred in the 2007 season when nine pairs fledged a minimum of 11 young. This represented an average of at least 1.2 fledglings per pair, well below the 4.6 fledglings predicted in the model based on data from the Devon population. Productivity, as measured by minimum number of fledglings observed, was again low in 2008 but then increased markedly in 2009 (table 3). Productivity levels recorded during the project must be regarded as minimum estimates, because in order to reduce disturbance, nest visits were not undertaken routinely. Productivity became harder to monitor as the number of pairs grew and occupied a much larger area. For this reason it is probably most useful to use the percentage of successful nests as a comparison with other areas. In Devon, Evans *et al.* (1997) found that 54% of nests produced fledglings, while in an area of orange groves in Spain the equivalent figure was 61% (Barba & Lopez 1990; Ponz *et al.* 1996). Using this statistic, the Cornish Cirl Buntings have done well, exceeding the Devon average in seven of the nine years monitored (table 3).

It is well known that Cirl Bunting breeding success is adversely affected by poor weather, with periods of prolonged rain being particularly detrimental (Evans *et al.* 1997). This has had a noticeable effect on the Cornish population with summers when rainfall was above average and temperature below average (such as 2007 and 2012) resulting in lower than average productivity. With every successful nest being crucial to the success of the project in the early stages, supplementary food in the form of live mealworms was provided near known active nests during periods of wet weather. During 2009–14, over 70 pairs were provisioned, from a high of 19 pairs in 2011 to only three pairs in 2015. In most cases this was for a short period, but feeding was carried out for up to a week in particularly poor weather.

Table 3 and fig. 1 show that the population has increased steadily. However, during the early years, growth was slow. In 2009, there were only 13 pairs, well below the 30 pairs predicted by the model. As a result, it was decided to continue with two more years of releases. The final year of releases was in 2011 and by 2012 the population had increased to 44 pairs, when it was felt that no further releases were necessary. In 2013 the population dropped to 28 pairs; some decline was anticipated, since this was the first year with no boost to the population from birds released in the previous year. In addition, breeding success in 2012 was poor (table 3) so recruitment from wild-bred birds was limited. Since then the population has increased to 52 pairs in 2015.

There was some evidence that hand-

Table 3. Breeding population and productivity of Cirl Buntings *Emberiza cirlus* in Cornwall, 2007–15.

	2007	2008	2009	2010	2011	2012	2013	2014	2015
no. pairs	9	12	13	16	28	44	28	39	52
min. successful fledglings per pair	1.22	1.25	3.23	2.44	2.46	1.09	2.36	2.62	1.88
percentage of successful nests	66	40	71	65	63	32	58	79	73

Table 4. Productivity of hand-reared and wild-bred pairs of Cirl Buntings *Emberiza cirlus* in Cornwall in 2011.

pair composition	no. pairs	no. nests	no. successful nests	no. fledglings per pair
both wild-bred	9	18	13 (72%)	3.44–4.44
one wild-bred; one hand-reared	13	22	14 (64%)	2.42–3.08
both hand-reared	6	10	4 (40%)	1.5–1.83

reared birds were less productive than their wild-bred counterparts. This was especially evident during 2011 (table 4), and may be partially responsible for the slow growth of the population. Again, this is perhaps not surprising as wild-bred birds benefit from a natural upbringing as opposed to those that are hand-reared in captivity. However, once hand-reared birds gain experience in the wild this difference diminishes and some went on to be extremely productive.

Discussion

This reintroduction project appears to have established a sustainable population of Cirl Buntings in the Cornish release area. Further monitoring, albeit at a less intensive level, will be required to confirm that the population continues to grow and expand. Experience with the recovery of the Cirl Bunting population in Devon is that once habitat issues are addressed the birds respond favourably, with the potential for fairly rapid and sustained increases. It is also clear that given good breeding conditions they can be very productive, something that is helped by their long breeding season (April to September) and the fact that they can have up to three broods in a season. Winter mortality does not appear to be a limiting factor though there have been no prolonged periods of snow cover since the project started, something that is known to be an issue for this species (Evans 1997). In the event of a hard winter in future, the established feeding sites will hopefully help to minimise any adverse effects on the population. Poor summer weather, in particular prolonged cold and wet conditions, reduces breeding performance and hence slows population growth but there is little that can be done to offset this. Supplementary feeding

Paul Keene

215. Colour-ringed Cirl Bunting *Emberiza cirlus*; a full-grown bird from the release scheme in Cornwall in March 2007, colour-ringed when taken from the nest in Devon the preceding summer.

Box 1. Summary of key success factors and lessons learnt.

- Establishing and maintaining good relationships with landowners and managers at both the donor and the release sites was essential to ensure their support for the project.
- Partnership working was crucial to ensure the full range of expertise required to complete such a complex project.
- Trialling hand-rearing and husbandry techniques was extremely beneficial before undertaking the full-scale project.
- Adaptive management was vital, with monitoring of the success of specific interventions feeding back into management decisions.
- Funding should be considered at the earliest stages of the project, taking into account the full lifetime of the project, including contingency and the post-release monitoring and intervention stages.
- Continuity of staff throughout the project was extremely beneficial, although clear protocols and guidelines can help to provide this continuity.

near nest sites was undertaken during such conditions and was felt to have been beneficial with the adults readily feeding their chicks the live mealworms provided. This is not likely to be necessary in the long term but was considered to be a useful temporary measure while the population was still becoming established.

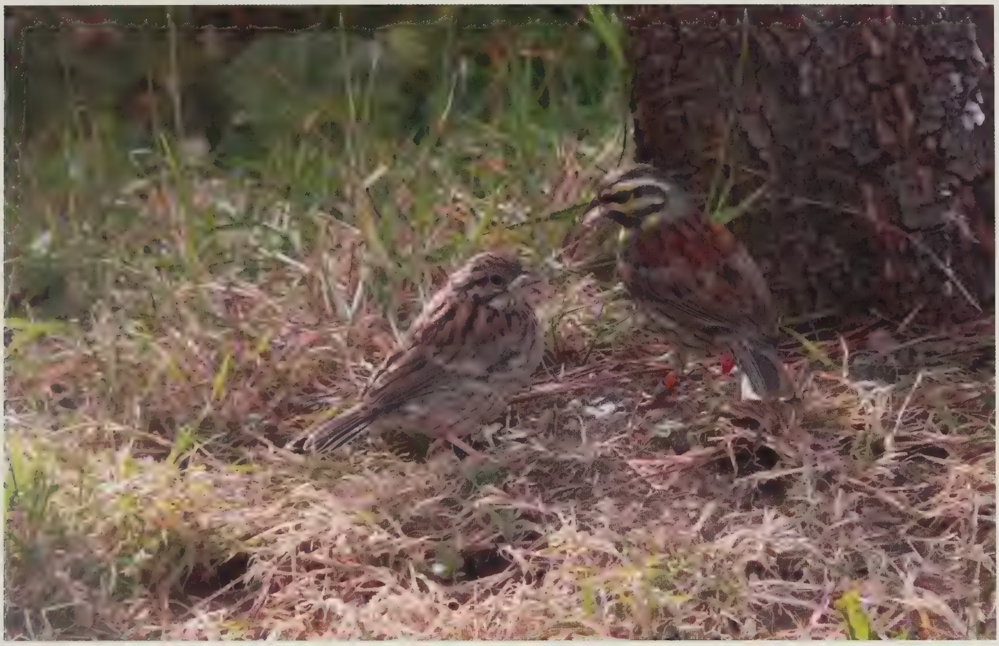
The project has evolved as it has progressed with valuable lessons learnt in the early stages and changes implemented when necessary. Early in the project, modifications were made to both the selected release area and the preferred avicultural techniques. During the release phase, a fundamental change was the decision to undertake two further years of releases, without which the project would have had a far lower chance of success. Although the model used to predict population growth was invaluable for planning, it did not take into account the lower productivity due to a predominance of first-year birds, the effects of hand-rearing or the adverse impact of poor weather. Future models should seek to include such factors where possible. Based on our experience, we suggest that any future Cirl Bunting reintroduction projects should plan for a minimum of six years of releases. The same is likely to apply to other small passerines with similar demography. Another important change made during the project was to have multiple release sites, in response to predators habituating to the presence of young birds as described above; again, this seems a sensible guideline for any future projects.

Since the availability of sufficient suitable habitat is key to the long-term success of this project, environmental schemes and the promotion of Cirl Bunting habitat options by farmland advisers are important considerations for the future. Agri-environment schemes can deliver all the habitat needs of this species and good wintering habitat is especially important in facilitating population increase and spread (Evans 1997). Cereal stubble (particularly following spring barley) is therefore a vital component of any Cirl Bunting agreement. Farmers within the Roseland Peninsula have been receptive to these agri-environment schemes and in 2015 all the breeding pairs nested within 200 m of an area under such management. It will be important to maintain this focus on habitat management if we are to see Cirl Buntings continue to increase and expand their range in Cornwall.

Conclusions

After six years of releases, the Cirl Bunting has been re-established as a breeding species in Cornwall. Within Britain, this is one of only a handful of bird species to have been subject to a successful reintroduction programme – and the only passerine.

Indeed, it is thought that this is the only successful passerine reintroduction to have been undertaken in Europe. Farther afield, of the 63 bird reintroduction projects in 2008–16 documented by the IUCN, only 19



Stuart Croft/RSPB

216. A hand-reared male Cirl Bunting *Emberiza cirlus* (individually recognisable by the unique colour-ring combination) feeding its own chick in the wild; Cornwall, June 2014.

involved passerines and not all of these were considered to have been successful. The success of this project therefore represents a significant contribution to reintroduction biology with many lessons that will be applicable to other passerines considered as reintroduction candidates.

Over the next decade, the existence of suitable low-intensity mixed farming within southern Cornwall will be essential to the survival of this newly established population. If this can be achieved through the implementation of appropriately targeted environmental stewardship schemes, then the future prospects for this species look bright. Indeed, models suggest that the Cirl Bunting may be one of the species to benefit from changes in climate (e.g. Huntley *et al.* 2008) and when combined with the availability of low-intensity mixed farming this could facilitate its spread to other parts of southwest England and perhaps even farther afield.

Acknowledgments

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References

Barba, E., & Lopez, J. A. 1990. Breeding season, clutch size and breeding success in the Cirl Bunting *Emberiza cirlus*. *Mediter. Ser. Biol.* 12: 79–88. [In Spanish with English summary]

Bradburn, J. D. 1891. *British Birds: their successful management in captivity with other allied information for fanciers.* 3rd edn. The Feathered World, London.

Bradbury, R. B., Bailey, C. M., Wright, D., & Evans, A. D. 2008. Wintering Cirl Buntings *Emberiza cirlus* in southwest England select cereal stubbles that follow

a low-input herbicide regime. *Bird Study* 55: 23–31.
Brown, A., & Grice, P. 2005. *Birds in England.* Poyser, London.
Buckingham, D. L., Evans, A. D., Morris, A. J., Orsman, C. J., & Yaxley, R. 1999. Use of set-aside in winter by declining farmland bird species in the UK. *Bird Study* 46: 157–169.
Cox, W. A., Thompson, F. R., Cox, A. S., & Faaborg, J. 2014. Post-fledging survival in passerine birds and the value of post-fledging studies to conservation. *J. Wildlife Management* 78: 183–193. doi:10.1002/jwmg.670
Donald, P. F., & Evans, A. D. 2001. Identification of suitable sites for Cirl Bunting *Emberiza cirlus* translocation in the UK. Unpublished RSPB report, Sandy.
Evans, A. D. 1992. The numbers and distribution of Cirl Buntings *Emberiza cirlus* breeding in Britain in 1989. *Bird Study* 39: 17–22.
— 1997. Cirl Buntings in Britain. *Brit. Birds* 90: 267–282.
— & Smith, K. W. 1994. Habitat selection of Cirl Buntings wintering in Britain. *Bird Study* 41: 81–87.
—, —, Buckingham, D. L., & Evans, J. 1997. Seasonal variation in breeding performance and nestling diet of Cirl Buntings in England. *Bird Study* 44: 66–79.
Fountain, K., Jeffs, C., Croft, S., Gregson, J., Lister, J., Evans, A., Carter, I., Chang, Y. M., & Sainsbury, A. W. 2016. The influence of risk factors associated with captive rearing on post-release survival in translocated Cirl Buntings *Emberiza cirlus* in the UK. *Oryx* doi:10.1017/S0030605315001313
Huntley, B., Collingham, Y. C., Willis, S. G., & Green, R. E. 2008. Potential impacts of climatic change on European breeding birds. *PLoS ONE* 3(1): e1439. doi:10.1371/journal.pone.0001439
IUCN. 2013. *Guidelines for Reintroductions and Other Conservation Translocations.* Version 1.0. IUCN Species Survival Commission, Gland, Switzerland.
Jeffs, C. 2005. Cirl Bunting rear and release trial 2004/5. Unpublished RSPB report, Exeter.
Lock, L. 1999. Saving the Cirl Bunting... and lots more. *British Wildlife* 11: 17–21.
— & St Pierre, P. 1997. Cirl Bunting site review. Unpublished RSPB report, Exeter.
MacDonald, M. A., Cobbold, G., Mathews, F., Denny, M. J. H., Walker, L. K., Grice, P. V., & Anderson, G. Q. A. 2012. Effects of agri-environment management for Cirl Buntings on other biodiversity. *Biodiversity & Conservation* 21: 1477–1492.
McGill, I., & Sainsbury, A. W. 2005. The Cirl Bunting (*Emberiza cirlus*) disease risk analysis. Unpublished Zoological Society of London report, London.
Mellersh, W. L. 1902. *A Treatise on the Birds of Gloucestershire.* John Bellows, Gloucester.
Montagu, G. 1833. *Ornithological Dictionary of British Birds.* Orr & Smith, London.
Parslow, J. L. F. 1968. Changes in status among breeding birds in Britain and Ireland. Status change amongst British birds. *Brit. Birds* 61: 61–62.
Peach, W. J., Lovett, L. J., Wotton, S. R., & Jeffs, C. 2001. Countryside stewardship delivers Cirl Buntings (*Emberiza cirlus*) in Devon, UK. *Biological Conservation* 101: 361–371.
Ponz, A., Barba, E., & Gil-Degado, J. A. 1996. Population changes and breeding ecology of the Cirl Bunting *Emberiza cirlus* in eastern Spain. *Bird Study* 43: 38–47.
Sellarés, C., & Maggs, G. 2011. Cirl Bunting (*Emberiza cirlus*) husbandry guidelines for the Cirl Bunting Reintroduction Project. Internal Project Report.
Sitters, H. P. 1982. The decline of the Cirl Bunting in Britain, 1968–80. *Brit. Birds* 75: 105–108.
Stanbury, A., Davies, M., Grice, P., Gregory, R., & Wotton, S. 2010. The status of the Cirl Bunting in the UK in 2009. *Brit. Birds* 103: 702–711.
Ticehurst, N. F. 1909. *A History of the Birds of Kent.* Witherby, London.
Wilson, J. D., Evans, A. D., & Grice, P. V. 2009. *Bird Conservation and Agriculture.* Cambridge University Press, Cambridge.
Wotton, S. R., Langston, R. H. W., Gibbons, D. W., & Pierce, A. J. 2000. The status of the Cirl Bunting *Emberiza cirlus* in the UK and the Channel Islands in 1998. *Bird Study* 47: 138–146.
—, Rylands, K., Grice, P., Smallshire, D., & Gregory, R. 2004. The status of the Cirl Bunting in Britain and the Channel Islands in 2003. *Brit. Birds* 97: 376–384.

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From the Rarities Committee's files

BBRC and Yellow Wagtails

Adam Rowlands

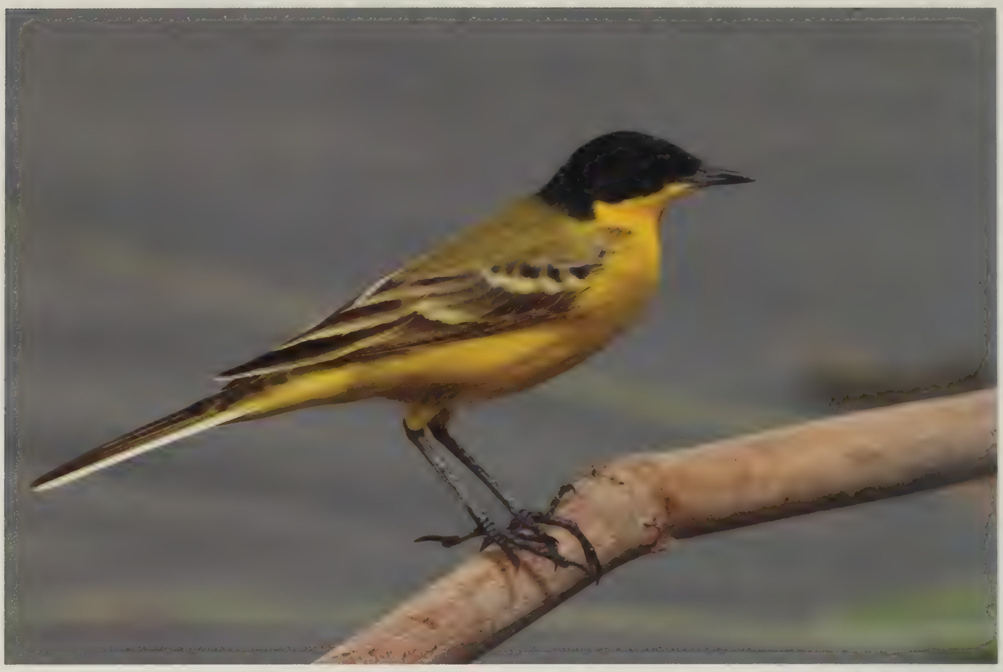
Abstract This paper describes BBRC's current approach to vagrant forms of the Yellow Wagtail *Motacilla flava* in Britain, and includes examples of recent records from the Rarities Committee's files. Its purpose is to assist observers faced with putative vagrant Yellow Wagtails, helping them to focus on key features and to record sufficient information to confirm the identification. Potential aspects for further study that would enable improved understanding of the identification of these forms are also included.

Introduction

The identification of vagrant forms of the Yellow Wagtail *Motacilla flava* has long posed challenges for records committees. The taxonomy of this species is complex and there is a lack of consensus among different authors and authorities in recognising the numerous subspecies. The subspecies *flavissima*, which most British birdwatchers call 'Yellow Wagtail', is a common, but declining summer visitor to Britain. 'Blue-headed Wagtail' *M. f. flava* and 'Grey-headed Wagtail' *M. f. thunbergi* (hereafter referred to as *flava* and *thunbergi*, respectively) are recorded annually in Britain, in variable numbers, and were classed as casual breeders and passage migrants in the BOU's 8th Checklist (BOU 2013b). 'Black-headed Wagtail' *M. f. feldegg* (hereafter *feldegg*) and 'Ashy-headed Wagtail' *M. f. cinereocapilla* (hereafter *cinereocapilla*) are both on the British List and occur as vagrants, with records of both considered by BBRC.

'Eastern Yellow Wagtail' has also been accepted onto the British List, with records attributed to the *plexa/tschutschensis/simillima* group of subspecies following DNA analysis (BOU 2013a,b). Even this categorisation highlights the challenges involved, with the form *simillima* not being recognised, or treated as a synonym of *tschutschensis*, by several authors. Alström & Mild (2003) adopted the latter arrangement and also treated the form *plexa* as a synonym of *thunbergi*, yet a subsequent genetic analysis assigned *plexa* to the 'Eastern Yellow Wagtail' group (Pavlova *et al.* 2003). The genetic divergence of the eastern group was highlighted in other studies (Ödeen & Alström 2001; Alström & Ödeen 2002) and supported by proposed morphological (Red'kin & Babenko 1999; Red'kin 2001) and vocal differences (Alström & Mild 2003), with the plumage similarities among males from western and eastern forms attributed to convergent evolution (Ödeen 2001). Species-level taxonomy is beyond the scope of this review, but the case for 'Eastern Yellow Wagtail' being a separate species from 'Western Yellow Wagtail' appears compelling.

The occurrence of intergrades between individuals from sympatric populations of different subspecies is well established, adding further complexity to identification matters, since pairings between two forms can produce offspring that resemble a third form. For example, 'Channel Wagtail' is a presumed intergrade *flavissima* × *flava*, which is encountered in northern France and southern Britain with some frequency and has been confused with 'Sykes's Wagtail' *M. f. beema*. In 2009, *beema* was removed from the British List (BOU 2011) when it was concluded that none of the accepted records


Daniele Occhiato

217. Male Black-headed Wagtail *Motacilla flava feldegg*, Jahra Pools, Kuwait, 2nd March 2012. A typical spring male. Note that the black hood extends onto the lower nape and forms a 'shawl' curving around below the rear of the ear-coverts. This is typical of many adult males in the core part of the breeding range, but not of the majority of vagrants in the UK. It is not clear whether this feature is age-related, and is less common among first-summer birds, which are more likely to be encountered as vagrants; but this point is worthy of further study. More photographs are available at: www.pbase.com/dophoto/cutrettola

could be identified with confidence. Kehoe (2006) encouraged the submission to BBRC of records of birds resembling the forms *beema*, *leucocephala* and *lutea*, but it is unlikely that these would prove acceptable without a ringing recovery and their identification is not covered further in this paper. The problem of intergrades also clouds the identification of vagrant *feldegg* (in terms of pairings with nominate *flava*) and *cinereocapilla* (where the situation is complicated by pairings with *iberiae* – not currently accepted on the British List – and *flava*).

There is also evidence that occasional aberrant individuals have the potential to show characters of vagrant forms. The mechanisms for this were explored by Ödeen & Björkland (2003), who studied the evolution of Yellow Wagtail plumages. They found that, on an evolutionary scale, new subspecies plumages have arisen very quickly and without much genetic change during interglacial periods. The evolution of new plumages was driven by the sexual whims of a very small number of founders at the sparsely populated northern edge of the range of various wagtail populations. Yellow Wagtail plumages are under very simple genetic control, and Ödeen & Björkland speculated that a single mutation may be sufficient to give an individual wagtail the plumage characteristics of a different subspecies. This helps to explain why – occasionally – individuals or even local populations of Yellow Wagtails may arise that show atavistic or abnormal plumages. Consequently, it is imperative that as many key features as possible are determined on any potential vagrant wagtail, which includes recording their calls in some instances. It seems unlikely that an aberrant individual would demonstrate all the plumage features and vocalisations associated with some of the vagrant forms.

The aim of this paper is to provide some background to how BBRC's treatment of vagrant Yellow Wagtail subspecies has been determined and to use some examples of recent records to demonstrate how these criteria have been applied. It is hoped that these will help observers faced with a putative vagrant to gather sufficient information to allow the assessment of future records. It will also hopefully encourage those studying Yellow Wagtails to test the assumptions and provide further information that may assist BBRC to refine its criteria further.

Black-headed Wagtail *Motacilla flava feldegg*

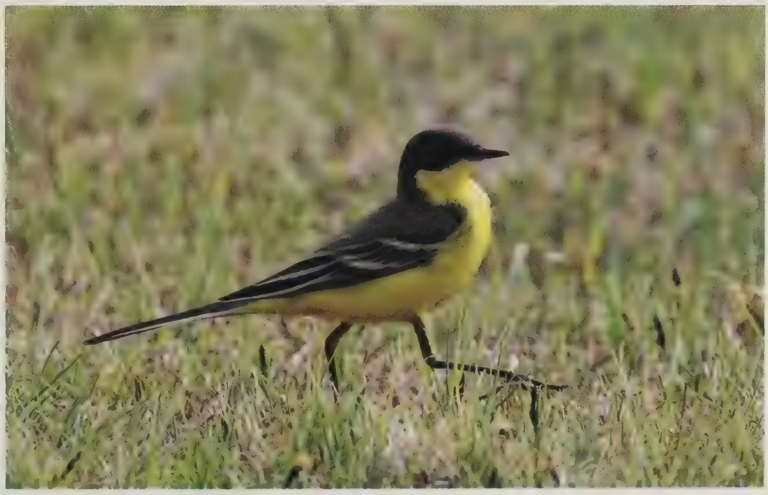
There are currently 18 accepted records of *feldegg* in Britain (Hudson *et al.* 2014); note that the form '*melanogrisea*' is treated as synonymous with *feldegg* here, following Alström & Mild (2003). The identification criteria used by BBRC to assess *feldegg* were covered by van den Berg & Oreel (1985) and Rowlands (2003), but continue to cause debate. There has been some recent discussion as to whether:

- the potential pitfall of confusion with dark-headed *thunbergi* (van den Berg & Oreel 1985) is realistic
- call is a pre-requisite to acceptance
- white marks on the head or supercilium should be a genuine barrier to acceptance (Rowlands 2003)

Hellström *et al.* (2009) provided further information on the Swedish Rarities Committee's approach to this taxon. They reviewed Swedish records of *feldegg* and found 36 of the 45 records not proven, since they lacked the detail that would eliminate dark-headed *thunbergi*. The Swedish Committee consulted closely with the Norwegian, Danish and Finnish Rarities Committees to ensure that it was taking a consistent approach. The Norwegian Committee reviewed its records in 2009 and found the two previously accepted records not proven, but they also identified a further acceptable record (Olsen 2009). The Danish Committee reviewed its records in 2009, after which only one of 14 previous records remained accepted (Kristensen *et al.* 2009). In the Netherlands, all 33 claims of this form between 1960 and 2011 have not been accepted following a review by the Dutch rarities committee (CDNA), with a further bird from 2015 not accepted and another individual from that year under review (www.dutchavifauna.nl/species/balkankwikstaart?all=1). Given that these countries have far greater experience of the variability in *thunbergi* than we routinely encounter in Britain, it seems sensible for BBRC to follow their interpretation that this remains a genuine identification pitfall.

Hellström *et al.* (2009) described dark-headed *thunbergi*, with the blue-grey hues on the head replaced by more or less pure black, as 'rare but regular'. Such birds viewed from the front or from the side can be 'indistinguishable from *feldegg*', but reveal a more typical *thunbergi* head pattern (with bluish-grey tones) when viewed from the rear.

The Swedish and Danish Committees concluded that limited white feathering in the supercilium of a bird that otherwise looks

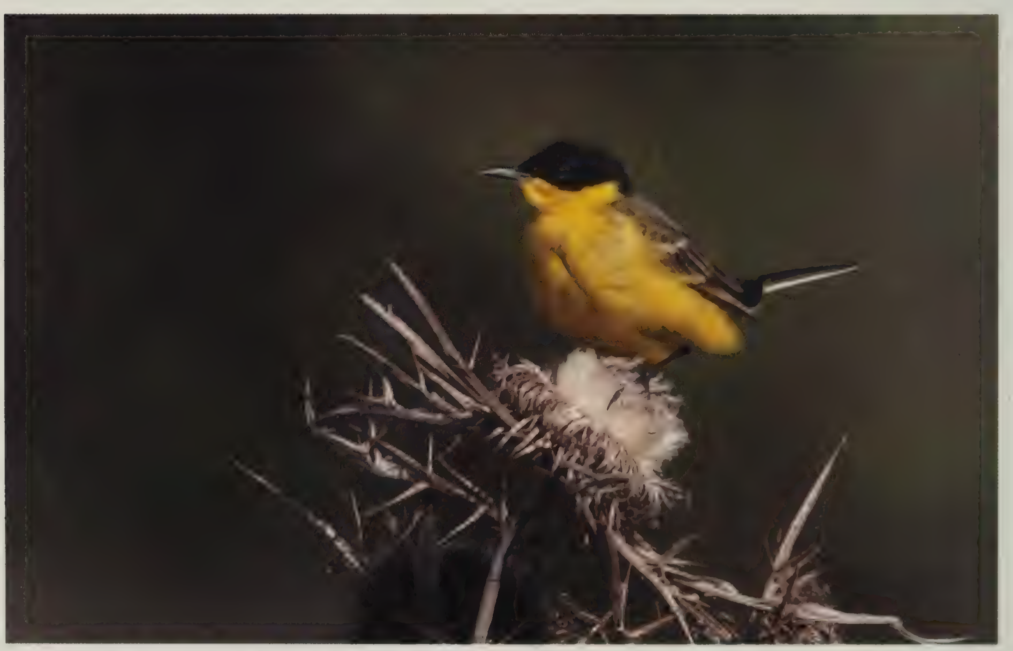

Peter Nielsen

218. Male Grey-headed Wagtail *Motacilla flava thunbergi*, Denmark, May 2011. This individual illustrates the caution required when identifying a vagrant Black-headed Wagtail *M. f. feldegg* in Britain. Some *thunbergi* can show an apparently black 'hood' and careful attention is required to record the actual colours of the head pattern, especially any glossy-black tones and the exact colour tones of the nape feathers, to conclusively identify a vagrant *feldegg*.

genuine will not automatically pose an obstacle to acceptance as *feldegg*. This conclusion relates to data in Alström & Mild (2003) from different areas of Turkey, where 3–10% of males showed occasional white feathers or, at most, a trace of a pale supercilium. Turkey is far from the known transition zones, and while Alström & Mild did report that birds showing such features could be intergrades (common) or pure (less common) *feldegg*, it is clear that birds showing such features in Britain are more likely to be intergrades but could be pure *feldegg*. BBRC has discussed publishing records of birds showing pale feathering in the supercilium; this would be consistent with the Committee's recent approach to some Pine Buntings *Emberiza leucocephalos* and Collared Flycatchers *Ficedula albicollis* – accepting such birds while noting an apparent minor anomaly (see *Brit. Birds* 97: 620–621, 106: 621). In terms of *feldegg*, this position has yet to be adopted, but would (for example) require a reassessment of the 1999 Essex bird (a male wagtail closely resembling a Black-headed Wagtail but with some pale feathering in the supercilium – see Rowlands 2003). Whatever the conclusion of these deliberations, BBRC continues to welcome well-documented records of such birds (Stoddart in prep.).

Hellström *et al.* (2009) recommended a detailed description of the black head and neck, including an assessment of colour tones in different lighting and viewing angles. Following Rowlands (2003), BBRC requires descriptions to establish clearly the colour and extent of gloss on the crown and nape, with evidence of a jet-black or glossy-black head. BBRC has accepted some well-documented, presumed first-summer birds that have not shown a strikingly glossy-black head, but a suite of other characters consistent with *feldegg* has helped to eliminate the *thunbergi* pitfall. The approach of Hellström *et al.* also requires evidence that the bird lacks strong green markings across the breast, suggesting the 'necklace' that is more typical of spring *thunbergi* is rarely shown (and if so weakly) in *feldegg*.

Both BBRC and Hellström *et al.* (2009)



Annika Forsten

219. Male Black-headed Wagtail *Motacilla flava feldegg* or intergrade, Dragoman Marsh, northwest of Sofia, Bulgaria, April 2007. This is an individual showing limited pale feathering in the supercilium. The question as to whether such markings should prevent acceptance remains a vexed one. This bird was photographed within the area of intergradation between *feldegg* and *flava* as recognised by Alström & Mild (2003), but a number of other individuals photographed at this site would be readily acceptable as *feldegg* on plumage characters. More photographs are available at: www.caluta.liitin.net/Linnut/Motacilla/feldegg.html consider call important, but not essential, for identification. Kristensen *et al.* (2009) concluded that, in the absence of photographs, call was essential for identification. Observers are thus encouraged to describe, or preferably record, the distinctive buzzing call of *feldegg* to support any claim. It will be necessary to prove that this was an accurate and genuine representation of call notes and not confused with song phrases, which are more rasping or buzzing in quality. Note that *feldegg* will also give less harsh calls, similar to those of *flava* and *flavissima* (pers. obs.), but these are not diagnostic. Photos are not considered essential, but if not available then any description has to be of high quality and the circumstances of the observation convincing. It remains to be established whether a variant of *M. f. plexa* with a black head could occur, since *plexa* has a more rasping call – approaching that of *feldegg* – and this could provide a further pitfall.

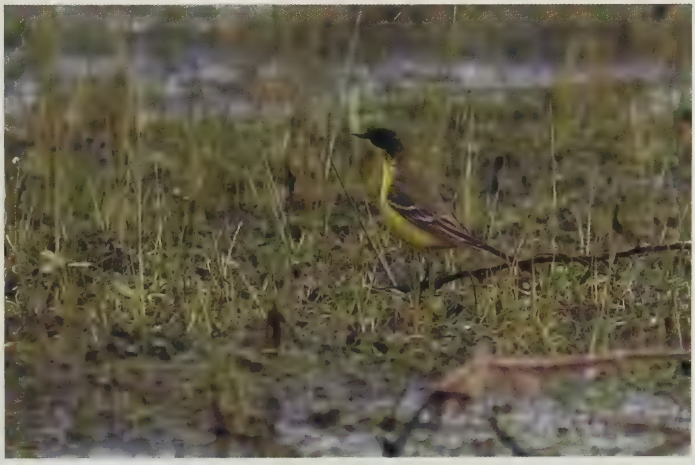
Comparing accepted British records with reference images of *feldegg*, it is clear that the most striking adult *feldegg* – showing yellow wing-bars and the black hood extending down onto the upper mantle (plate 217) – do not seem to occur in Britain, although this may reflect the fact that the majority of spring vagrants are first-summer birds. Furthermore, a higher proportion of individuals show white in the supercilium than is the case in the core part of the breeding range. Our birds do tend towards the plumages described by Corso (2001) for passage birds in Italy but it is evident from the breeding distribution of *feldegg* that these birds are at the very western limit of the range and thus likely to include a higher proportion of intergrades. By the same token, it seems likely that we can expect more intergrades in Britain. A recent record of a bird showing white in the supercilium is included in the examples from the BBRC files below.

In conclusion, the criteria that BBRC has been using to assess claims of *feldegg* in Britain broadly correspond to those currently used by other rarities committees in northwest Europe. We are confident that these are robust, but welcome the opportunity for decisions to be challenged should new material become available to enable birds to be identified confidently by other means.

Black-headed Wagtail: examples from the Rarities Committee's files

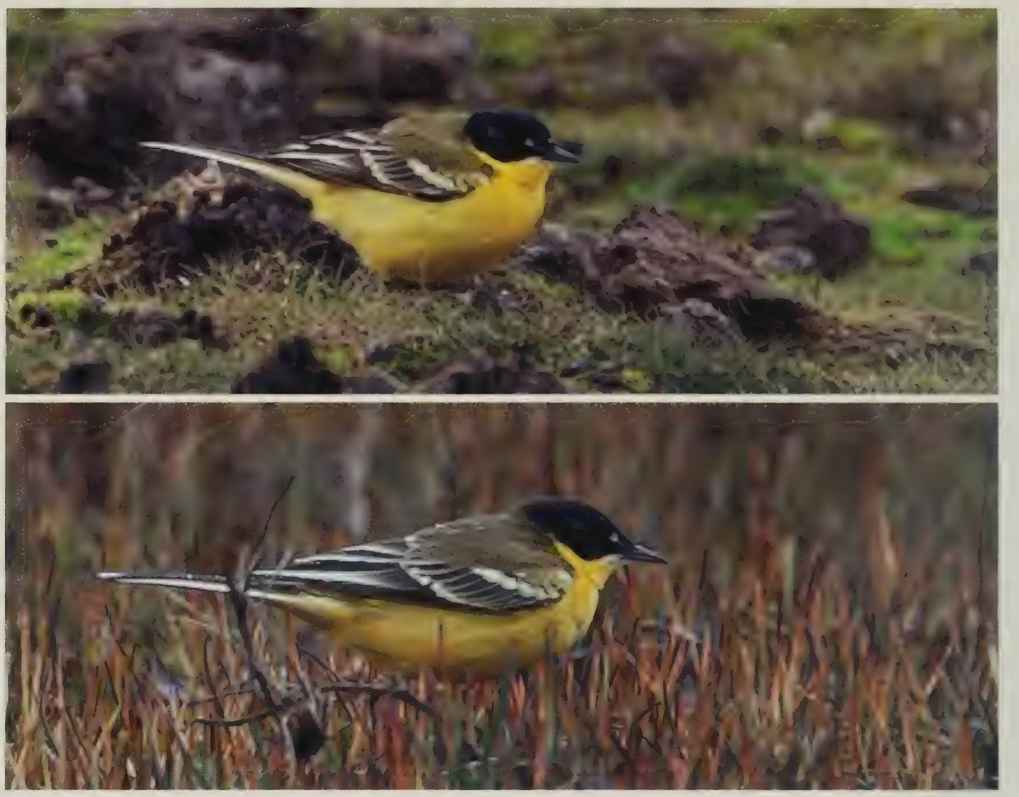
1. Land's End, Cornwall, 29th April to 1st May 2010

This bird (plate 220) was discovered at Land's End by Mark Warren, who described its calls as 'more frothy and buzzing' than those of a Yellow Wagtail, closer to those of a Citrine Wagtail *M. citreola*; the call was heard several times during the period of observation and was transcribed as a buzzing 'zrrei'. Close examination revealed the nape feathers to be tipped olive-green, which is compatible with fresh *feldegg* in spring. The crown was not particularly 'glossy' in damp conditions on the first day of observation, but did appear glossy when observed in bright sunshine on the second day. Martin Elliott's photographs were supported by a comprehensive description from the finder, who was clearly experienced with Yellow Wagtail forms and aware of the dark-headed *thunbergi* pitfall.



Martin Elliott

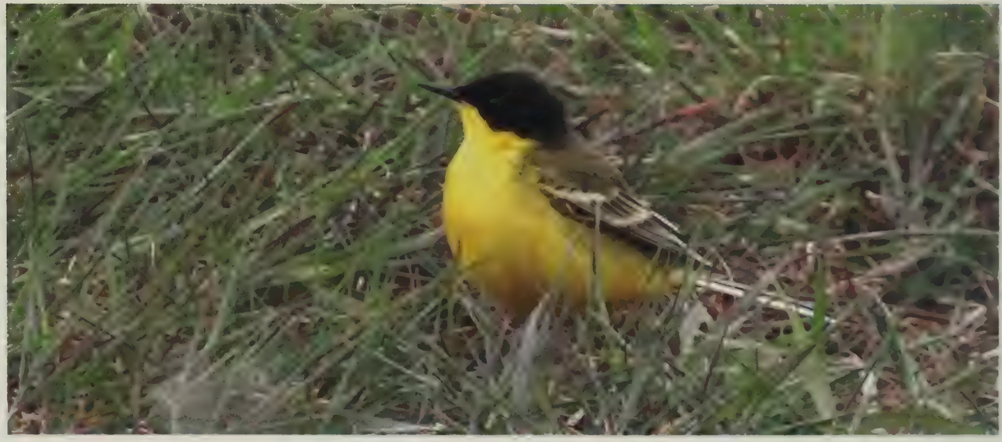
220. Male Black-headed Wagtail *Motacilla flava feldegg*, Cornwall, April 2010. This individual might have been problematic if the submission had consisted simply of photographs, but a comprehensive written description meant that it was accepted unanimously on first circulation (*Brit. Birds* 104: 617). You can view the original submission here: www.britishbirds.co.uk/wp-content/uploads/2014/07/2567.pdf



Ian Fisher

Ian Fisher

221 & 222. Male Yellow Wagtail *Motacilla flava*, Cresswell Pond, Northumberland, April 2010. The lack of glossy-black feathering on the head, the nape pattern and some pale feathering in the supercilium were aspects that led BBRC to consider this record not proven as Black-headed Wagtail *M. f. feldegg*. The written description confirmed the challenges of recording wing-bar colour accurately, with the comment being made that the tips of the median coverts could appear either white or yellow in the field, despite looking clean white in the images. Ultimately, BBRC was not convinced that an intergrade could be eliminated on the evidence provided (*Brit. Birds* 108: 632). You can view the original submission here: www.britishbirds.co.uk/wp-content/uploads/2014/07/2545.pdf



Ian Robinson

223. Male Yellow Wagtail *Motacilla flava*, Filey, Yorkshire, May 2013. This bird caused a split vote among BBRC members, but was ultimately considered not proven as *feldegg*. The lack of detail on whether the crown appeared glossy and the exact colour of the nape, combined with the lack of vocalisations, led some members to conclude that dark-headed *thunbergi* could not be ruled out (*Brit. Birds* 108: 631). You can view the original submission here: www.britishbirds.co.uk/wp-content/uploads/2014/07/4731.pdf

2. Cresswell Pond, Northumberland, 18th April 2010

This bird (plates 221 & 222) was seen by many observers during its four-day stay and a comprehensive description and images were supplied by Ian Fisher. It was considered a very strong candidate for *feldegg*. Its calls were described as hoarse, rasping and buzzing, which certainly indicated *feldegg*. However, the black crown was described as definitely not glossy and there was a narrow white supra-loral stripe and a few pale feathers behind the eye, creating the effect of a broken supercilium. The lower nape was green and the border between that green and the black part of the nape was diffuse. This bird generated a split vote among the Committee. Some members were keen to publish it as *feldegg*, with a proviso that the pale markings in the supercilium suggested an intergrade; others felt that the nape pattern and whitish wing-bars were also anomalous. The final verdict was not proven on present knowledge.

3. Filey, Yorkshire, 28th May 2013

This bird (plate 223) was found by Ian Robinson, and seen also by Ian Glaves and Clive Scholefield. Without a telescope, the observers concentrated on stalking the bird in order to photograph it. Their submission noted a 'solid black head along with the yellow chin and throat' but also noted that they had not attempted to 'put together a full feather-by-feather description' as they had hoped that the photos would prove sufficient for BBRC to consider the record objectively. The photographs were convincing and this proved a difficult record to assess. Ultimately, the lack of supporting detail on the exact colour tones of the crown and nape and the lack of any description of the bird's call meant that the 'dark *thunbergi*' pitfall could not be ruled out satisfactorily. This record reinforces the need to collect as much supporting detail as possible when faced with a possible *feldegg*. In some circumstances the encounters will be brief and, as in this case, it may simply not be possible to gather sufficient evidence.

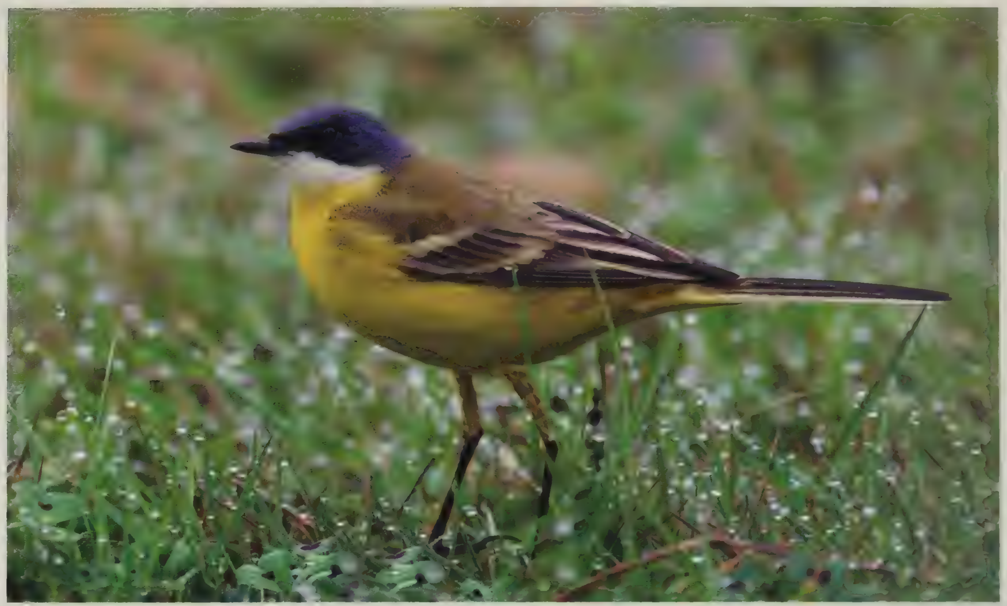
The above examples have been included as they involve photographed individuals which assist with emphasising the identification criteria currently deployed by BBRC. As noted above, photographs are not a pre-requisite for acceptance, as in the case of the well-described male *feldegg* that lingered in Wiltshire in June 2014 and for which the plumage and vocalisations were convincingly described (Hudson *et al.* in prep.). You can view the original submission here: www.britishbirds.co.uk/wp-content/uploads/2014/07/5466.pdf At present, all accepted British claims are of males, but the identification of some well-marked females may be possible with good supporting documentation.

Ashy-headed and Spanish Wagtails

Ashy-headed Wagtail *M. f. cinereocapilla* and Spanish Wagtail *M. f. iberiae* (hereafter *cinereocapilla* and *iberiae* respectively) are two forms of the Yellow Wagtail complex that breed in southern Europe. Both are migratory, wintering in Africa, and are thus potential vagrants to the UK. Another form, *M. f. pygmaea*, is similar to *cinereocapilla*; it is resident in Egypt and hence very unlikely to reach the UK, so it is not considered further. Both *cinereocapilla* and *iberiae* have been claimed in Britain, but only *cinereocapilla* is on the British List (BOU 2013b). One strong claim of *iberiae* from Suffolk in 1998 was considered by both BBRC and BOURC, but eventually considered not proven by BOURC.

Claims of *cinereocapilla* were not traditionally considered by BBRC, but work by the RIACT subcommittee showed that this race is genuinely rare in Britain and Kehoe (2006) made an appeal for records. Several claims were duly received and those accepted have been published. There are currently six accepted British records of *cinereocapilla* and four of 'Southern Wagtail' *cinereocapilla* × *iberiae* (Hudson *et al.* 2013). However, there are numerous records in local bird reports and county avifaunas that have yet to be submitted to BBRC and the true status of these southern forms is yet to be fully determined.

The problem of identifying these forms in a vagrant context is exacerbated by various factors. There are a number of areas of intergradation, between the two forms themselves and also between each and nominate *flava*. In France, these areas of intergradation have been recognised for a long time (Mayaud 1949) and the resulting variation ensures that a cautious approach is essential



Daniele Occhiato

224. Male Ashy-headed Wagtail *Motacilla flava cinereocapilla*, Firenze, Tuscany, Italy, March 2010. A classic example, with typically dark blue crown and nape, darker (blackish) lores and ear-coverts, and extensive white throat.

(Alström & Mild 2003; Frolet & Mezani 2006). Furthermore, recent studies of *cinereocapilla* in northeast Italy (well away from the range of *iberiae*) have described significant variation in plumage characters (Langenberg & Langenberg 2009). Finally, some plumages of *flava* and *thunbergi* can also confuse the issue, as can intergrades between these two forms.

The distribution of these southern forms is considered in more detail than that of the other taxa in this paper, to help explain the justification for considering the acceptance of potential intergrades between the two forms. The breeding range of *cinereocapilla* is predominantly in Italy (including Sicily and Sardinia) but also extends to southern France as far west as the Pyrenees. It is apparently rare in Roussillon, approaching the Spanish border. Small isolated populations also breed not far from the Rhône valley and locally in the Alps (not more than 50 pairs). Isolated breeding attempts (perhaps involving mixed pairings with *flava*) have been recorded in Franche-Comté and Alsace in eastern France (Dubois 2001). Birds resembling *cinereocapilla* also breed in southern Morocco, to the south of *iberiae* (van den Berg 2011). The breeding range of *iberiae* is, as the name implies, largely confined to the Iberian Peninsula, but it also breeds in the Balearic Islands and Morocco and sporadically in southwest France and along the Mediterranean coast east to the Camargue, where it occurs in low numbers (Dubois 2001). Birds appear back on their breeding grounds from mid March onwards, occupying territories from late March, and tend to arrive ahead of northern migratory forms (Bartroli 1991).

This paper deals solely with the identification of spring males (and adult males in autumn that look essentially spring-like). The identification of birds in other plumages is extremely difficult on present knowledge and BBRC is currently unable to consider these, but any proposed features for identification of individuals other than spring males would be extremely valuable.

Ashy-headed Wagtail *M. f. cinereocapilla*

This form typically shows a relatively dark, ashy-grey crown with a bluish tinge. It may show a small white stripe behind the eye, but this is lacking in many individuals. The lores and the area below the eye are typically darker than the crown and this darker feathering frequently extends across the ear-coverts to form a darker mask. The impression of a darker mask may be difficult to see in strong, direct light. Occasionally, birds may show a narrow white eye-ring, either complete or partial. The chin and throat are white, usually clearly demarcated from the yellow breast. The tone of green on the upperparts is typically a shade darker than in *flava* but this is difficult to determine on a lone individual.

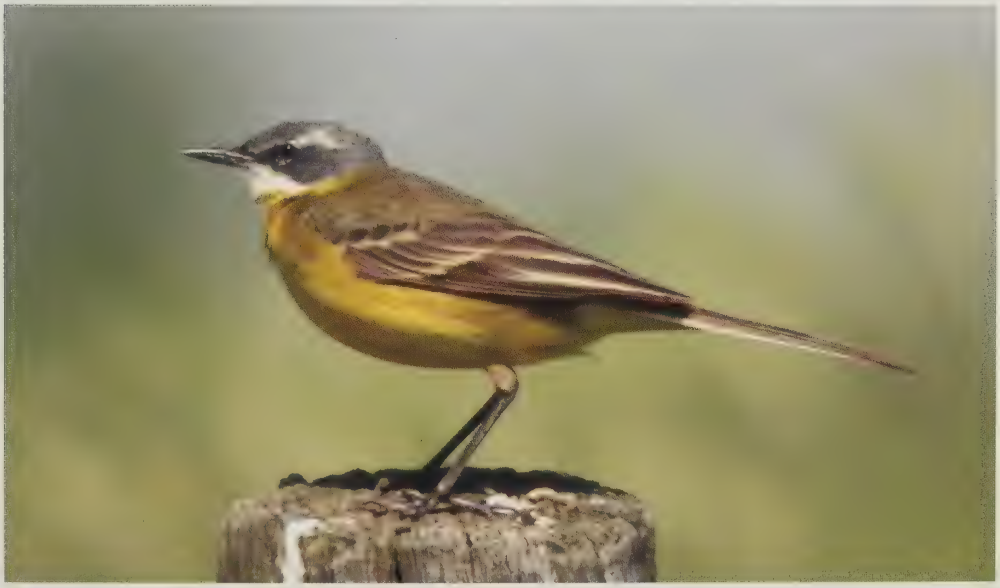
Spanish Wagtail *M. f. iberiae*

This form is generally similar to *cinereocapilla* but with a more complete white supercilium, typically narrower in front of the eye, broadening behind the eye. Some individuals show no white eye-crescents, but many show a small thin white crescent below the eye. This can be variable (and is never as prominent as on *flava*), from a thin line of tiny white feathers to a slightly more obvious line (Brian Small pers. comm.). The ear-coverts are typically a shade darker than the crown, although this may be difficult to determine in direct light. As in *cinereocapilla*, the crown is dark ashy-grey and the extensive white chin/throat is clearly defined from the yellow breast. The crown and nape are darker grey compared with *flava* and the mantle and scapulars are a darker olive-brown compared with the olive-green of *flava* (Dubois 2001); again, these are difficult to interpret on a lone vagrant. Dubois describes the bill as a little longer and stouter than that of *flava* and slightly upturned.

'Southern Wagtail' *M. f. iberiae* x *cinereocapilla*

This intergrade form is found mainly along the Mediterranean coast of southern France, where a population of 3,000–4,500 pairs includes birds of *iberiae* and *cinereocapilla* phenotypes (Dubois 2001). It dominates the population of Yellow Wagtails in this region (and has done so for decades – see Mayaud 1949) and may represent a 'stable intergrade' or a 'hybrid zone' of secondary intergradation (Williamson 1955). It is found predominantly on coastal saltpans in southern France but also in very small numbers on coastal marshes in Tarragona, in northeast Spain (Bartroli 1991).

Birds from these populations typically either resemble *cinereocapilla*, but with a more extensive area of white behind the eye, or *iberiae*, but with the supercilium broken



Dave Appleton

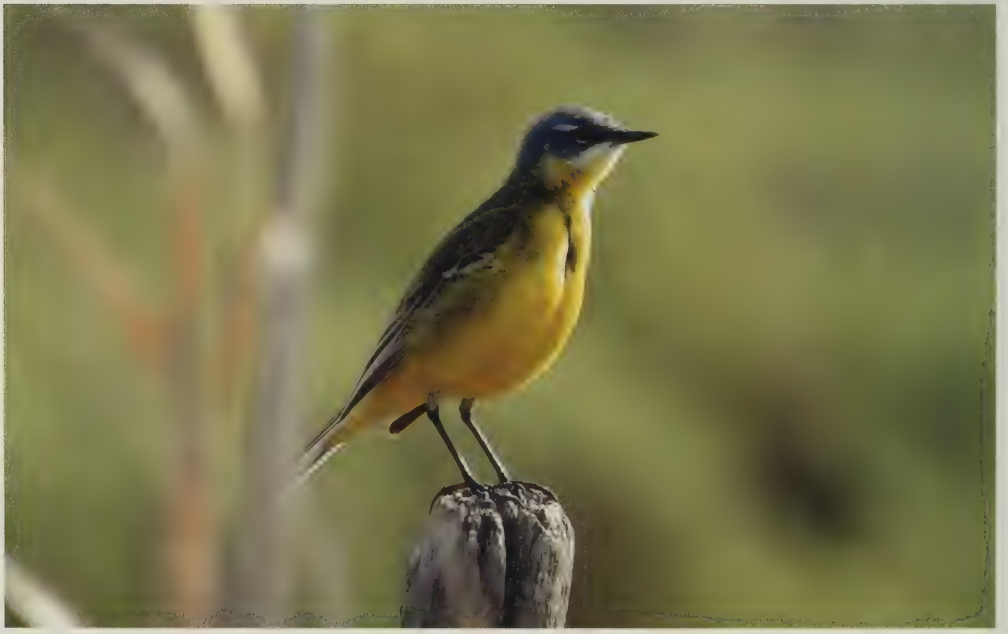
225. Spanish Wagtail *Motacilla flava iberiae*, Portugal, April 2006. This bird shows marginally darker crown, lores and ear-coverts, the unbroken white supercilium narrowing in front of the eye and the dark olive upperparts that would, along with call, help to identify a vagrant *iberiae* in Britain. It shows a narrow white crescent below the eye, which is occasionally broader or absent in this form. Genuine *iberiae* can also show a darker crown and rear ear-coverts. A combination of broad white lower eye-crescent, relatively pale blue (rather than blackish-blue) lores and crown, and a broader supercilium extending to reach the base of the bill would count against identification as *iberiae*.

above the eye. Again, the bill is a little longer and stouter than that of *flava* and slightly upturned (Dubois 2001).

This intergrade population at the north end of the range of the two forms suggests that a proportion of British vagrants may originate here. This is the main reason that BBRC has chosen to label individuals showing intergrade characters as 'Southern Wagtail'. When publishing such records, BBRC does not claim that these individuals are definitely intergrades, simply that they cannot be assigned confidently to *iberiae* or *cinereocapilla*. Bartroli's (1991) studies of a 'Southern Wagtail' population in northeast Spain failed to locate any individuals that closely resembled textbook examples of the parent forms, except for a bird that had been ringed in Italy and should therefore have been a pure *cinereocapilla*.

The Dutch committee for avian systematics (CSNA) now includes *cinereocapilla*, *iberiae* and *pygmaea* as a separate species, White-throated Wagtail *M. cinereocapilla*. There are currently three accepted Dutch records (Bot *et al.* 2012): two in 2006, accepted as nominate *cinereocapilla*, and one at Makkum in 2004, not accepted to form, and thus equivalent to BBRC's 'Southern Wagtail'. All of the accepted Dutch records have included the diagnostic call.

The harsh calls of *cinereocapilla* and *iberiae* are very similar to the typical calls of *feldegg* and distinct from those of *flava* and *thunbergi*. This supports the theory that the origin of the first two forms stems from an advance by *feldegg* into the southern part of the range of *flava*, as proposed by Williamson (1955). Some eastern *thunbergi*, probably of the contested form '*plexa*', may have somewhat similar harsh calls, typical of the eastern forms of the *flava* complex, but research by The Sound Approach team (see Box 1) has shown that these eastern *flava* calls are distinct from those of the southern *flava* group, and are closer to those of Citrine Wagtail. The southern wagtails will also give less harsh calls, similar to those of *flava* and *flavissima*, but these are not diagnostic. Consequently, harsh calls are still a critical aspect in the identification of vagrant southern wagtails, and at present these are considered a prerequisite for an accepted record. Hearing multiple calls is ideal, especially if not sound-recorded, to confirm the rasping quality and be certain of ruling out an occasional part



Aurélien Audevard

226. Yellow Wagtail *Motacilla flava*, Camargue, France, May 2002. This bird was photographed in the breeding range of 'Southern Wagtail' *M. f. iberiae x cinereocapilla*, but the extensive yellow in the throat would preclude a safe identification in a vagrant context. It may be an intergrade with nominate *flava* or could be within the variation of 'Southern Wagtail'.

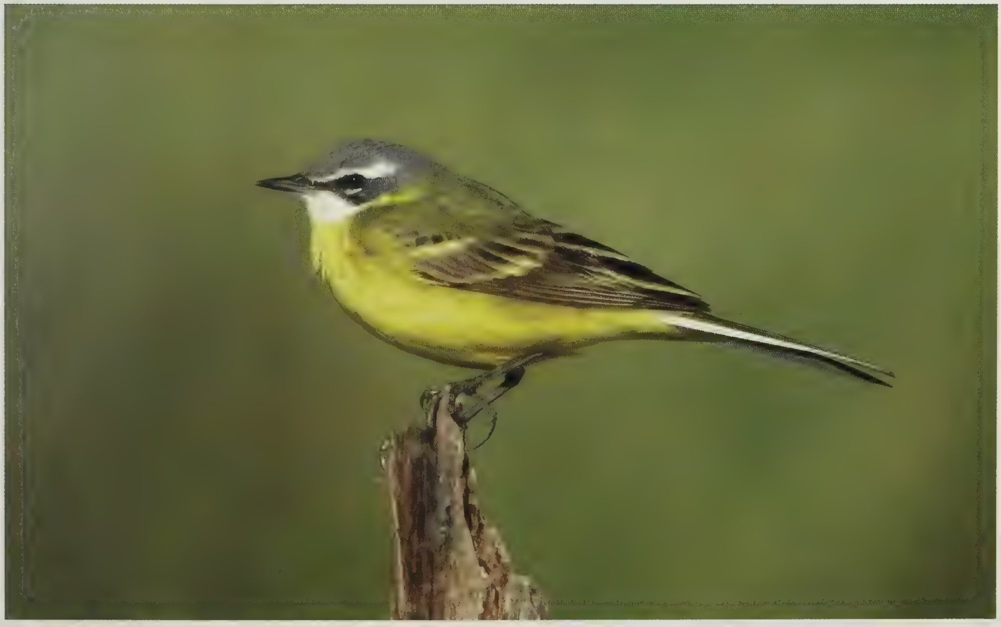
song phrase or an odd harsh call from one of the western taxa (see also Box 1).

Intergrade population *M. f. flava* x *iberiae*

This intergrade form is found on the Atlantic coast of France, predominantly between the Spanish border and the Loire Estuary, with small isolated populations inland in Lot-et-Garonne department and at Auvergne in the Massif Central. It is found mainly on old saltpans, coastal marshes and cultivated fields (Dubois 2001). It resembles *iberiae* but can show a paler blue crown and nape and/or ear-coverts, a broader white supercilium and yellow extending onto the throat. Dubois (2001) and Frolet & Mezani (2006) highlighted the challenges that this intergrade poses for the safe identification of *iberiae* in the Bourgogne region of France, and this intergrade must be considered when assessing potential claims of *iberiae* in Britain. Any individual that appears to show a paler crown and nape than expected, particularly in combination with a white crescent below the eye and a call more typical of *flava*, should be treated with particular caution. Dubois describes the bill as a little longer and stouter than that of *flava* and slightly upturned in some individuals, a characteristic shared with *iberiae* × *cinereocapilla.*

Intergrade population *M. f. flava* x *cinereocapilla*

This intergrade form breeds locally in south-east France (possibly represented by only a few dozen pairs), but probably also north to Lorraine and with an additional small population in the lower valley of the Rhône (Dubois 2001). Intergrades between these two forms have also been described from Switzerland (Schweizer 2005). Birds that fit the phenotype of typical *cinereocapilla* are also frequently encountered in these areas (Brian Small pers. comm.). The descriptions of these birds highlight the similarity of some individuals to *iberiae* and, while the population is small, they should be considered when attempting to identify potential vagrants. Such intergrades typically retain the lower white eye-crescent of *flava* and the ear-coverts are not darker than the nape. Although these



Aurélien Audevard

227. Yellow Wagtail *Motacilla flava*, Aquitaine, France, April 2010. This bird, photographed in the breeding range, shows how birds from the *flava* x *iberiae* intergrade population pose a challenge to the safe identification of *iberiae* in Britain. The combination of a prominent white lower eye-crescent, the relatively pale blue (rather than blackish-blue) lores and crown, the supercilium extending to reach the base of the bill and the paler olive upperparts (more typical of *flava*) would count against identification as *iberiae*.

characters are potentially not beyond the variation of *iberiae*, any potential vagrant displaying them needs to be treated with caution. The studies describing the intergrade characters have focused on morphological features and it would be valuable to research the vocalisations of such birds to establish the importance of call in distinguishing them from *iberiae* or *iberiae* × *cinereocapilla.*

Other pitfalls

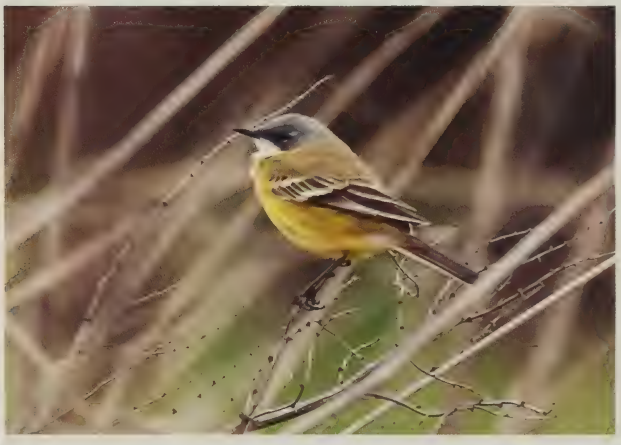
Variation in *thunbergi* has to be considered when identifying vagrant *cinereocapilla.* Individual *thunbergi* and *flava* well away from any potential intergrade population can show a white throat and it is considered that this may be more frequent among first-summer birds (Alström & Mild 2003). Any variant *thunbergi* should be distinguishable from a genuine *cinereocapilla* by the absence of a sharp demarcation between the white throat and yellow upper breast, and by call. Dark green feathering across the breast forming a broken necklace is also indicative of *thunbergi* and should be lacking in a genuine potential *cinereocapilla.* Variant *flava* with extensive white in the throat could also suggest *iberiae.* These can be distinguished from *iberiae* by the paler crown and nape; uniform coloration between the crown and ear-coverts; the presence of white flecking in the ear-coverts and the area below the eye; the slightly paler upperparts; and the call, which resembles that of *flavissima.* The border between the white throat and the yellow breast will not usually be as clearly demarcated as would be shown by a typical *iberiae.* Intergrades between *flava* and *thunbergi* can also potentially resemble *iberiae*, and such birds may show an extensive white throat, which is a particular pitfall. Voice remains an important character for distinguishing these birds, as they will give typical *flava* calls.

There is no doubt that more southern wagtails have been recorded in Britain than the BBRC statistics show, something which is not unusual for rare subspecies whose identification we are still coming to terms with, but it remains unclear whether the lack of submissions for some recent records has been a result of confusion over the level of detail required or wider uncertainty about the potential challenges of making a confident identification. The following examples give further information on particular records assessed by BBRC.

Ashy-headed Wagtails and 'Southern Wagtails': examples from the Rarities Committee's files

1. St Mary's Island, Northumberland, 29th April 2010

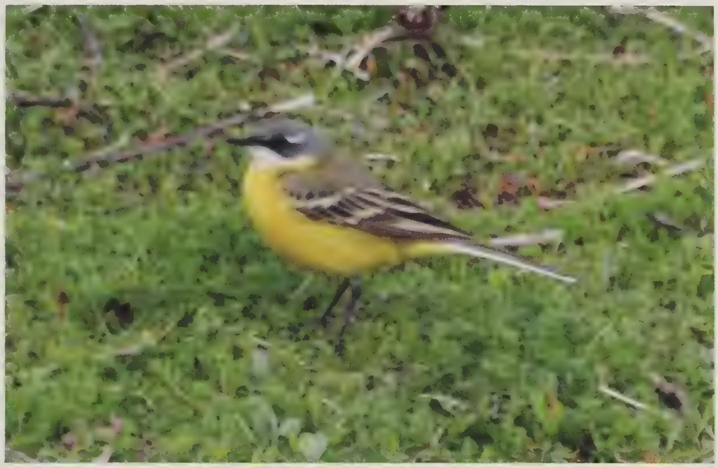
This bird (plate 228) was initially located by its call, which finder Alan Curry described as 'pretty much as I would expect a *flavissima* to sound like – as strident "tsrree"'. It was initially suspected to be a migrant *thunbergi* but the distinct white throat and early date seemed atypical and the bird was reidentified as an Ashy-headed. Research by the observers confirmed that *cinereocapilla* can give *flavissima*-like calls. When reviewing the record, however, BBRC was concerned about three aspects – the lack of contrast between the ear-coverts and the crown; the presence of a white crescent below the eye; and the call. In combination, these meant that this individual could not be convincingly assigned to *cinereocapilla* or *iberiae* × *cinereocapilla.*


Colin Bradshaw

228. Yellow Wagtail *Motacilla flava*, St Mary's Island, Northumberland, April 2010. This striking individual shows some characters of a 'Southern Wagtail' *M. f. iberiae* x *cinereocapilla*, but BBRC felt that other features indicated a possible *flava* intergrade. This, and the lack of the distinctive harsh call note, meant that the record was considered not proven. You can view the original submission here: www.britishbirds.co.uk/wp-content/uploads/2014/07/3010.pdf

2. 'Southern Wagtail', Farne Islands, Northumberland, 6th May 2010

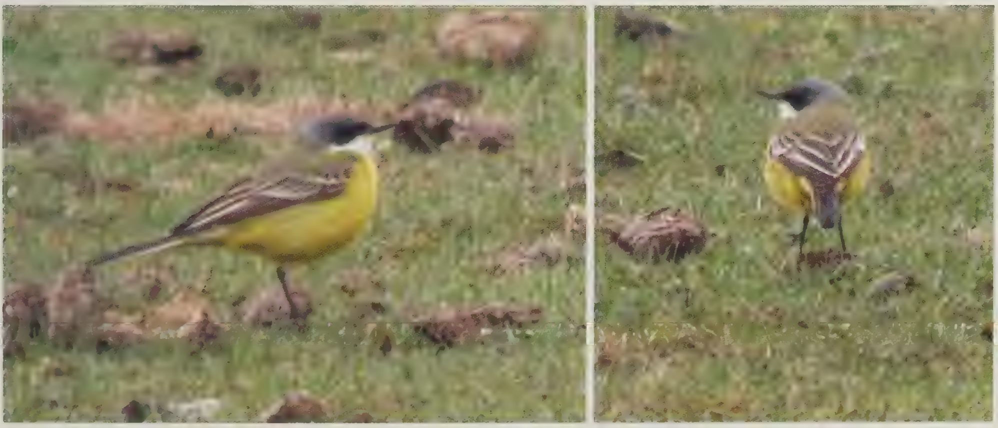
This striking bird (plate 229), found by Mark Breaks and seen by other observers on the islands that day, showed ear-coverts the same dark grey-blue colour as the nape and blackish lores. A well-defined supercilium was present behind the eye, but above the lores the white feathering was limited and ill-defined. The call was described as slightly harsher and buzzier than that of *flavissima*, although the submission acknowledged that the observers had had little experience of Yellow Wagtail calls on the islands in the previous two years. This bird provoked plenty of discussion among voting members: some felt that the plumage approached an acceptable *iberiae*, whilst others felt that the *flava* × *thunbergi* pitfall was a genuine concern. Ultimately, however, the combination of plumage and call description led to acceptance as 'Southern Wagtail' *M. f. iberiae* × *cinereocapilla* (*Brit. Birds* 104: 617).


Mark Breaks

229. 'Southern Wagtail' *Motacilla flava iberiae* x *cinereocapilla*, Northumberland, May 2010. This individual is rather pale in the ear-coverts, which could indicate *flava* influence, but it lacks a white crescent below the eye, which would be more typical in a *flava* intergrade. The extensive white throat and harsh call were important for its acceptance by BBRC, but such individuals require particularly close scrutiny. You can view the original submission here: www.britishbirds.co.uk/wp-content/uploads/2014/07/2755.pdf

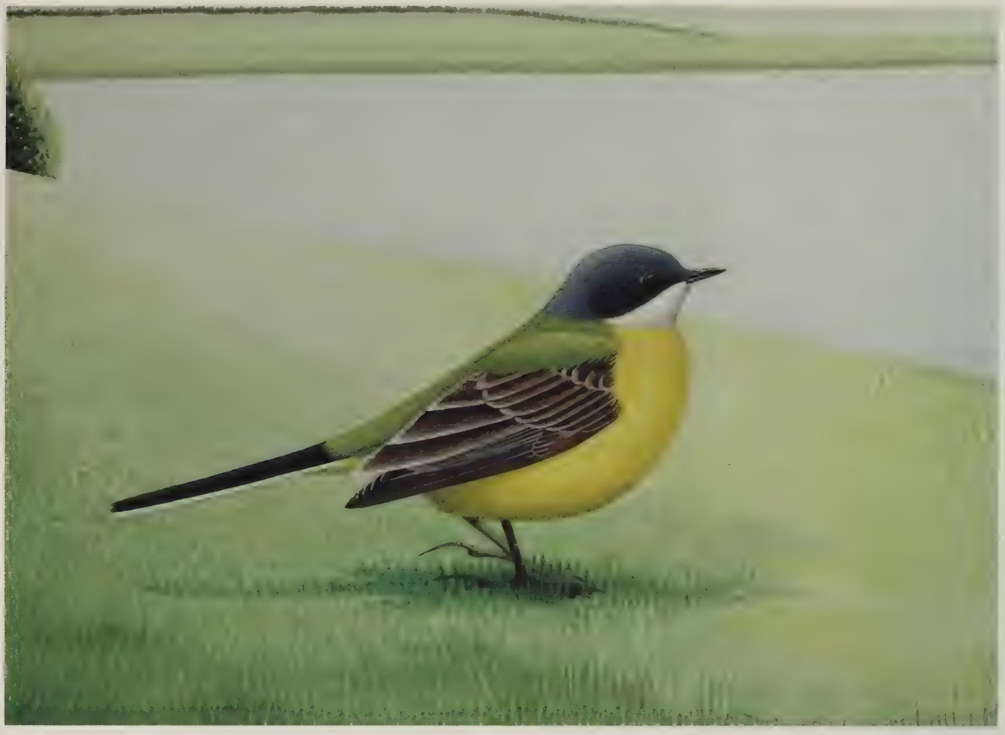
3. Ashy-headed Wagtail, Pentney Gravel-pits, Norfolk, 9th April 2006

This bird (plates 230 & 231) was found by Dawn Balmer and Peter Wilson, who compiled a detailed description which included a transcription of its rasping call, quite unlike *flavissima* and reminiscent of *feldegg*. As well as being well described, the head pattern was illustrated clearly in the photos submitted with the description, which helped to ensure a straightforward acceptance (*Brit. Birds* 103: 624).


Peter Wilson

Peter Wilson

230 & 231. Ashy-headed Wagtail *Motacilla flava cinereocapilla*, Pentney GP, Norfolk, April 2006. These images show the striking white throat and dark ear-coverts and lores, forming a dark mask. The bird showed some pale feathering in the supercilium behind the eye, but this is not atypical for *cinereocapilla*. You can view the original submission here: www.britishbirds.co.uk/wp-content/uploads/2014/07/1462.pdf



Paul Leonard

Fig. 1. Ashy-headed Wagtail *Motacilla flava cinereocapilla*, Thrybergh Reservoir, Yorkshire, April 1983. This record shows that the contemporary descriptions and/or illustrations of older records can be accepted by BBRC if the details are convincing. You can view the original submission here: www.britishbirds.co.uk/wp-content/uploads/2014/07/3152.pdf

4. Ashy-headed Wagtail, Thrybergh Reservoir, Yorkshire, 17th April 1983

This bird was found by Andy Roadhouse and Paul Leonard and seen by many other local birders during the day. The April date is particularly good for Ashy-headed and other southern wagtails, which tend to be early migrants (whereas *thunbergi* occurs in Britain primarily in May). Andy provided a copy of the notes that he wrote in the evening of the observation, along with a painting by Paul Leonard (fig. 1). The notes are clearly contemporary and include a transcription of the 'slightly harsher' call with an 'rrr' sound, the darker lores and ear-coverts forming a mask and the well-defined white chin and throat. BBRC found this record particularly convincing and it was accepted as an Ashy-headed Wagtail (*Brit. Birds* 106: 623).

'Eastern Yellow Wagtail'

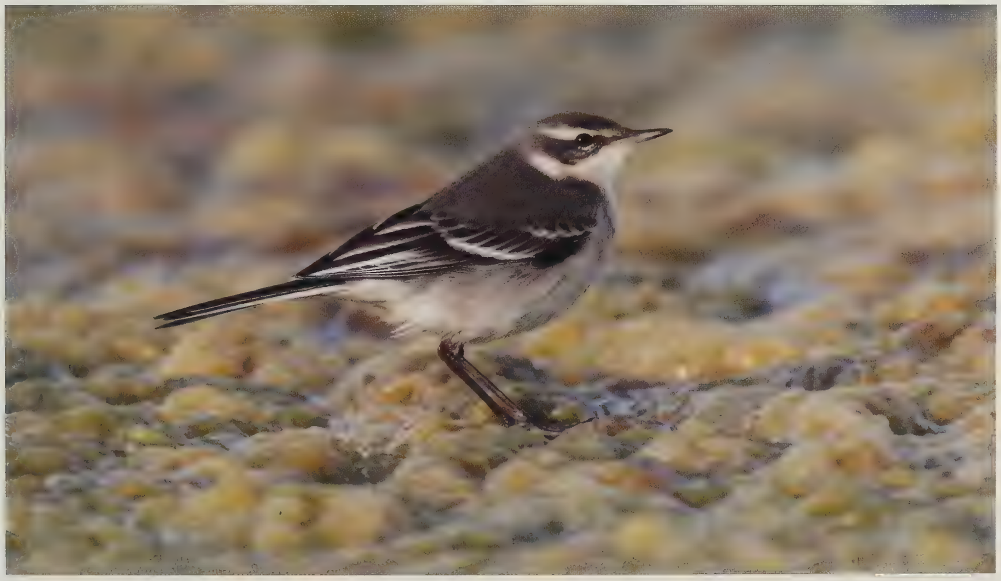
Kehoe (2006) followed Alström & Mild (2003) and synonymised the forms *simillima, angarensis* and *zaissanensis* with *tschutschensis* and encouraged the submission of photos and sound recordings of 'grey-and-white' birds in autumn that could potentially be of this form, while noting that claims would be assessed only if supported by photographs, biometrics and/or DNA. BBRC has subsequently followed BOURC's approach of publishing records attributed to an amalgamation of several forms. The race *M. f. simillima* was for many years on the British List on the basis of specimen records from Fair Isle in October 1909 and September 1912. DNA from these specimens ultimately proved that the latter was 'western' in origin, while the 1909 bird was confirmed as an 'eastern' bird, although it could not be assigned to a particular taxon (Collinson *et al.* 2013). The subspecies *simillima* was duly removed from the British List but the 1909 Fair Isle bird is formally recorded as belonging to 'one of the eastern subspecies, probably *plexa, tschutschensis* or *simillima*' (BOU 2013a,b). Two more-recent records have also been accepted as 'Eastern Yellow Wagtail' (Hudson *et al.* 2014).

As noted earlier, the taxonomy of Yellow

Wagtails remains contested. A significant genetic divide between western and eastern groups (Alström & Mild 2003) implies a potential species-level split. Within the eastern group, Pavlova *et al.* (2003) proposed a 'northeast Asian' clade of Yellow Wagtails incorporating *plexa* and *tschutschensis* and a 'southeast Asian' clade incorporating *taivana* and *macronyx*. Note that neither of these reference works recognises *simillima*, treating it as a synonym of *tschutschensis,* while Alström & Mild treated *plexa* as a synonym of *thunbergi*, although the genetic analysis confirms that it falls within the eastern group and this is supported by vocalisations (Magnus Robb, The Sound Approach pers. comm.).

BBRC is keen to document records of birds from the eastern group but, given the obvious complexities involved, has little option but to adopt a cautious approach, accepting only those which can be identified by some combination of plumage (ideally photographed), vocalisations and genetic evidence. Genetic analysis will enable the separation of the northeast and southeast Asian groups but records confirmed only by vocalisations will be published as 'Eastern Yellow Wagtail' *M. f. plexa/tschutschensis/taivana/macronyx*. Further research may yield additional morphological or vocal features to separate non-adult birds of the northeast and southeast Asian groups but currently we cannot differentiate these forms without genetic analysis (although, in theory at least, separating some spring males on plumage may be possible). There is, however, currently no evidence to confirm the occurrence of 'southeast Asian' birds in Britain.

Occasional records of 'grey-and-white' first-winter Yellow Wagtails, often in late autumn or even winter, have long been assumed to be of eastern origin but this has been hard to prove. Now, thanks to the analysis of both DNA and sound recordings, this hypothesis has been confirmed. In contrast with other vagrant wagtails considered here, the identification of autumn birds in non-breeding plumage is possible. Birds in their first autumn are often strikingly grey and white, resembling a juvenile Citrine Wagtail, and give harsh or buzzing calls which recall that species too. These calls are closer to those of Citrine than those of the southern wagtails (Alström & Mild 2003; see also Box 1). In this respect, the vocal characters appear to follow the results of genetic


Michael McKee

232. Eastern Yellow Wagtail, Out Skerries, Shetland, October 2011. This is a typical grey-and-white first-winter individual, resembling the form *Motacilla flava tschutschensis*. Note that the pale supercilium does not extend to form a pale 'surround' at the rear of the ear-coverts, which helps to distinguish it from Citrine Wagtail *M. citreola*. See main text for more details. More images of Eastern birds can be viewed at https://digdeep1962.wordpress.com/tag/wagtail, including some tentative suggestions to enable racial identification in autumn.

analyses, where the 'eastern' Yellow Wagtail clade appears more closely aligned to Citrine Wagtail than the 'western' Yellow Wagtail clades (Pavlova *et al.* 2003). Despite the superficial resemblance, Citrine Wagtail is generally straightforward to eliminate, thanks to differences in head pattern and bare-part colours (although occasional atypical Citrine Wagtails may lack the pale ear-covert surround; Bot *et al.* 2014), but eliminating other Yellow Wagtail taxa may be more difficult.

To compound the problems, Citrine Wagtail × Yellow Wagtail hybrids also exist and need to be ruled out in some situations. A possible hybrid was found at Seaforth, Lancashire & North Merseyside, on 26th August 2011, and the record was submitted to BBRC as a Citrine Wagtail, although the finder had expressed concerns about its identification shortly after it was found (see http://birdingfrontiers.com/2011/08/29/first-winter-citrine-wagtail/#). It was first located on call, which immediately suggested Citrine Wagtail, and showed a good head pattern for that species. However, the wing-bars appeared too poorly marked for Citrine in

Box 1. Calls of vagrant Yellow Wagtails

Magnus Robb,
The Sound Approach

In summary, the calls of Yellow and Citrine Wagtails fall into three main groups:

- ***flava*-type calls only** – e.g. *flava, flavissima, beema, thunbergi* (Scandinavian at least)
- **a mixture of *feldegg*-type and *flava*-type calls** – e.g. *cinereocapilla, feldegg, iberiae*
- ***citreola*-type calls only** – e.g. *citreola, plexa, taivana, tchutschensis*

Examples of these vocalisations can be accessed via The Sound Approach website at:
http://soundapproach.co.uk/calls-yellow-wagtail-bbrc-article

Two problems arise when identifying *feldegg*-type calls. A number of eastern taxa, including Citrine Wagtail and 'Eastern Yellow Wagtail', also have coarse, modulated calls, but can be identified as a third grouping, denoted above as '*citreola*-type' calls. The modulations of *citreola*-type calls are much finer, and the calls sound less coarse or 'untidy', and sharper and more 'metallic' than *feldegg*-type calls. In eastern Kazakhstan in spring, I have seen large numbers of *thunbergi*-lookalikes (presumed to be *plexa*), all of which had *citreola*-type calls. I have also observed many hundreds of *thunbergi* in the Netherlands in spring, none of which had *citreola*-type calls. It appears that Scandinavian *thunbergi* don't use *citreola*-type calls.

Eastern Yellow Wagtails sometimes give unmodulated, *flava*-like calls. I have heard this in recordings of birds from farther east than Taimyr, so it seems unlikely that they can be explained by intergradation. In the examples I know, the *flava*-like calls were given less often than modulated, Citrine-like calls. On being flushed, Eastern Yellow Wagtails almost invariably give *citreola*-type calls but in relaxed flight the calls can be more *flava*-like.

In spring, *flava*, *flavissima* and *thunbergi* males often include modulated, descending notes in their simple songs, which could be misidentified as *feldegg*-type flight calls by the unwary. I have even heard such song notes from wagtails passing on active migration flights, but only in spring. I have no evidence that they would be heard from an autumn migrant. There are a number of ways to recognise these as song notes rather than flight calls. They are often doubled, typically longer than flight calls, and usually (though not always) given from a songpost. In sonograms, they appear quite different from flight calls.

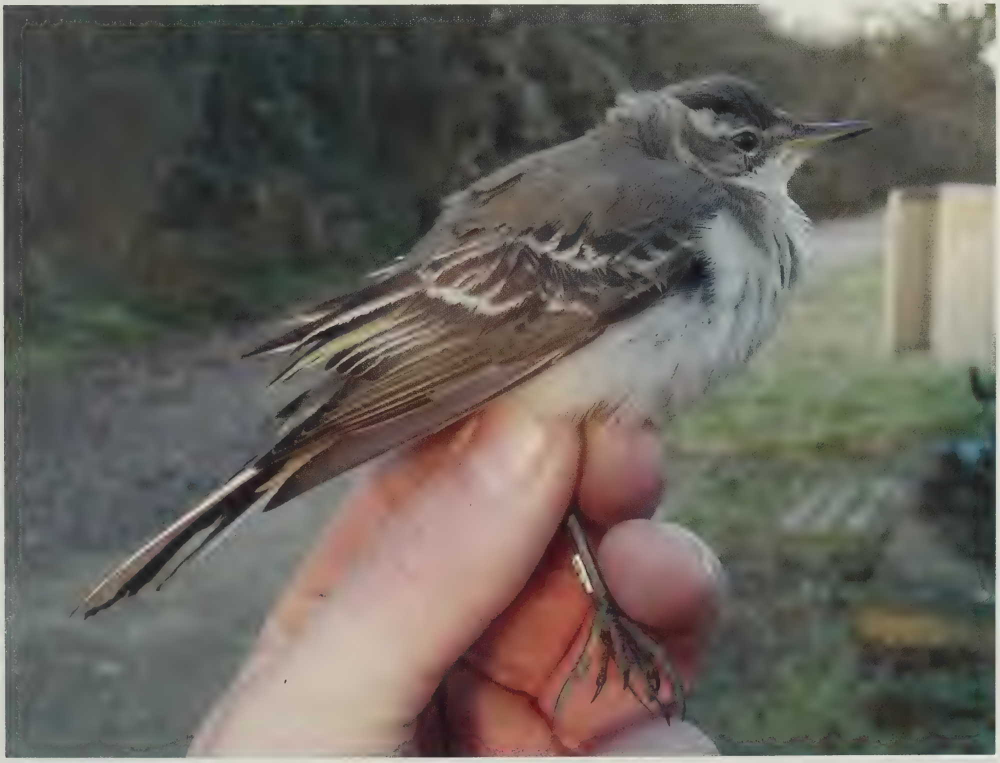
It is considered that, without genetic material, vocalisations are currently essential for identification of vagrant Eastern Yellow Wagtails, since the 'grey-and-white' plumage of first-winter birds can be shown (rarely) by some western birds and this becomes more frequent as you move east; some 25–30% of first-winter *beema* show this pattern (Alström & Mild 2003), while not all Eastern Yellow Wagtails are strikingly grey and white. The call is very similar to that of Citrine Wagtail, and good-quality sound-recordings should enable grey-and-white southern wagtails (*feldegg, cinereocapilla* and *iberiae*) to be eliminated. Conceivably, a written description of the call might suffice, from observers who are familiar with the different call types, but a field recording is certainly preferable.

August, when the wing-coverts should be relatively fresh in a bird of any age. Although they can become quite worn and narrow by late autumn/winter, this appears atypical for a pure Citrine Wagtail in late August. The underparts were described as 'suffused pale yellow' with white undertail-coverts, while the bill was described as all dark. The observer managed to obtain a couple of digiscoped images of the bird, one of which was submitted to BBRC. This bird clearly had some Citrine Wagtail influence (call, head and bill pattern), but the relatively poorly defined wing-bars and yellowish wash to the underparts were sufficient for it to be considered not proven (*Brit. Birds* 107: 651). Another controversial first-winter individual occurred in the Netherlands in September 2009 (see Bot *et al.* 2014 and http://birdingfrontiers.com/2011/08/25/eastern-yellow-and-citrine-wagtails). There is insufficient evidence to identify either bird confidently as a hybrid, but it is a possible explanation for the plumage features observed. Hybrids between these two species could potentially provide a pitfall for the identification of Eastern Yellow Wagtail; see Bot *et al.* (2014) for further detail.

Eastern Yellow Wagtails: examples from the Rarities Committee's files

1. Colyford, Devon, 4th–19th December 2010

The observers involved in this record deserve great credit for ensuring that all relevant detail was collected to prove beyond doubt that this bird was an example of the 'northeastern' group of 'Eastern Yellow Wagtail'. The bird was a relatively grey-and-white first-winter. It was photographed, both in the field and when trapped (see plate 233), and DNA analysis was possible from a feather sample (which enabled the southeastern forms *taivana* and *macronyx* to be excluded).



Steve Waite

233. Eastern Yellow Wagtail *Motacilla flava tschutschensis/plexa*, Colyford, Devon, December 2010. This was the first 'Eastern Yellow Wagtail' to be accepted by BBRC, some 101 years after the first for Britain, on Fair Isle. In reality, Eastern Yellow Wagtails almost certainly occur as rare annual migrants, but confirming the identification can be very difficult. You can view the original submission here: www.britishbirds.co.uk/wp-content/uploads/2014/07/3130.pdf

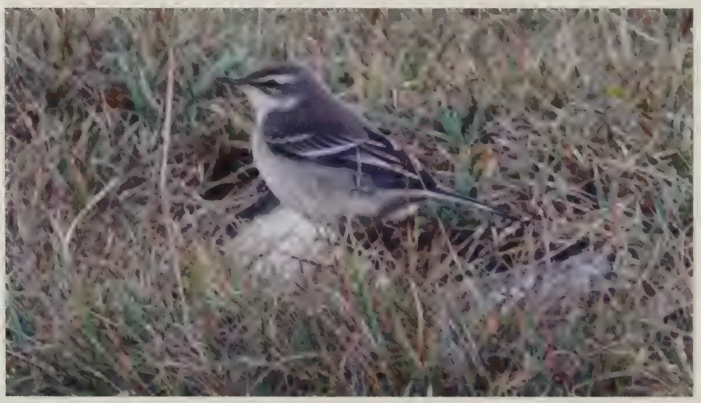
This became the first contemporary record of 'Eastern Yellow Wagtail' and provided BBRC with the opportunity to review a series of records and determine a framework for acceptance (see also Collinson *et al.* 2013).

2. Out Skerries, Shetland, 10th–11th October 2011

This bird (plate 232) was found by Michael McKee and Chris Turner, who submitted excellent photographs, video and sound recordings. You can view their original submission here: www.britishbirds.co.uk/wp-content/uploads/2014/07/3579.pdf BBRC asked Magnus Robb from The Sound Approach to analyse the sound recordings. He commented: 'To me the calls sound perfect for Eastern Yellow Wagtail, of the taxa *plexa* and *tschutschensis* at least (the ones I have experience of). They are strongly and finely modulated as well as being high-pitched, with the modulations concentrated in the higher part of the call. I think we can safely exclude taxa of the *flava-flavissima-beema-thunbergi* group (I've never heard them giving flight calls like this), and also the southern group that includes *feldegg*, *iberiae* and *cinereocapilla*. The latter, of course, also have modulated calls, but these are coarser and not concentrated in the higher-pitched parts of the call. There is another character that excludes any grey-and-white individual of the southern taxa, and that has to do with the first part of each call. In the southern group, the start of the call rises more slowly in pitch, this appearing as a more gentle slope in sonograms. In this [Shetland] bird the start of each call rises very abruptly in pitch.' The sound recordings enabled the bird to be accepted unanimously by BBRC.

3. Out Skerries, Shetland, 25th September 2011

This bird (plate 234) was another very strong candidate for Eastern Yellow Wagtail, located by one of the observers who found the bird described above, whose attention was drawn to the Citrine Wagtail-like calls. It was rather distant, but was photographed; an attempt to obtain sound recordings was made, but the distance from the bird and the windy conditions made this difficult. The main barrier to acceptance came from the sound recordings. The majority were unmodulated and appeared closer to typical *flava* calls, rather than the *citreola*-like calls of Eastern. Although not necessarily wrong for Eastern Yellow Wagtail, it was felt that the lack of modulated calls in the sound recordings was potentially a problem, and this caused a split vote among the Committee. Some members felt that the call transcription and images were sufficient to confirm the identification, others felt that the sound recordings should have been conclusive. The decision was perhaps influenced by the fact that this bird was in one of the very first batches of Eastern Yellow Wagtail claims to be considered by BBRC, and members were thus particularly cautious. Given the documentation provided, there is at least an opportunity to reconsider this decision in future as our knowledge of the subject develops.

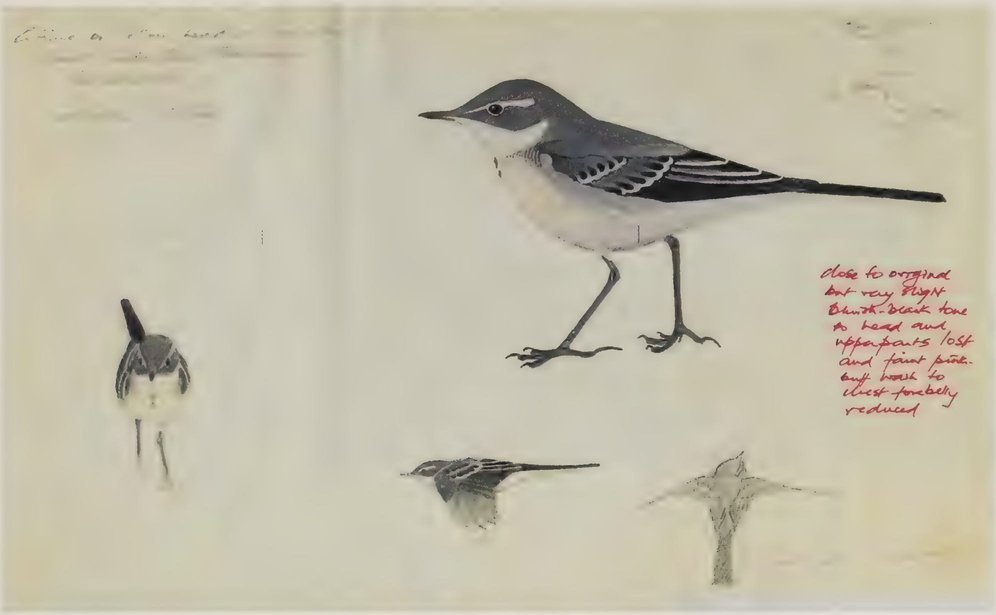


Michael McKee

234. Yellow Wagtail *Motacilla flava*, Out Skerries, Shetland, September 2011. This bird was almost certainly an Eastern Yellow Wagtail, with a Citrine-like call described by an experienced observer. Yet the sound recordings were inconclusive and led the Committee to a not-proven vote (*Brit. Birds* 107: 651). You can view the original submission here: www.britishbirds.co.uk/wp-content/uploads/2014/07/3580.pdf

4. Minsmere, Suffolk, 17th October to 14th November 1964

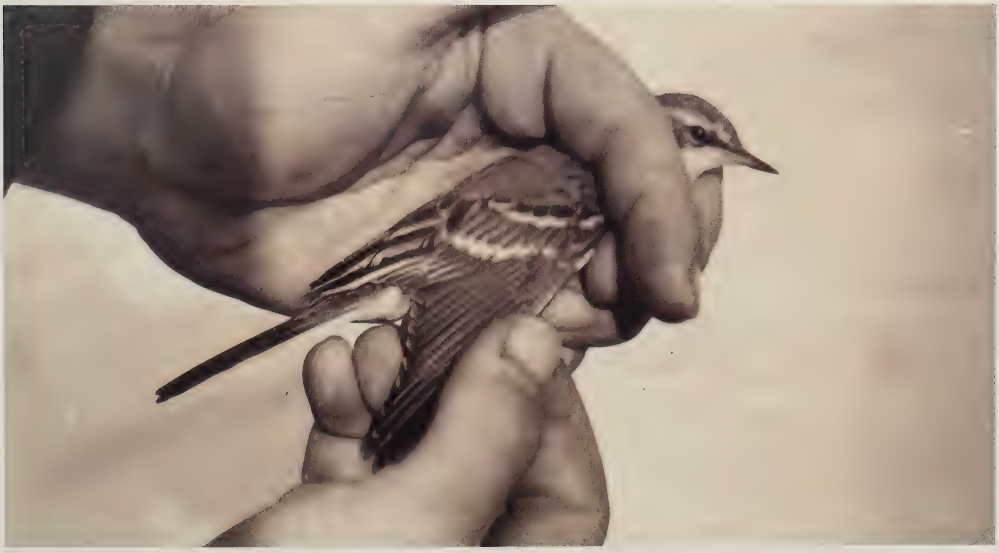
Found by Bert Axell, Peter Makepeace and volunteers on the reserve, this bird was originally identified and accepted as the



D. I. M. Wallace

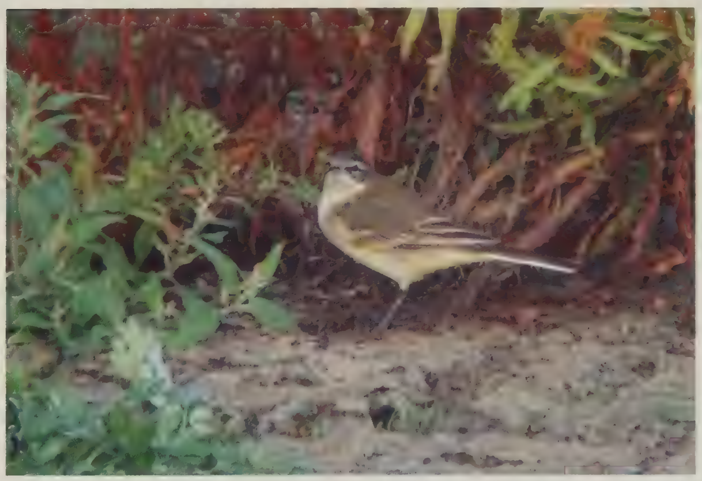
Fig. 2. Yellow Wagtail *Motacilla flava*, Minsmere, Suffolk, November 1964. These notes clearly show the head pattern of a Yellow Wagtail and not a Citrine Wagtail *M. citreola*, which the bird was originally believed to be. The grey-and-white plumage and late date indicate that this may well have been an Eastern Yellow Wagtail.

seventh Citrine Wagtail for Britain. It was well documented with a comprehensive description (both in the field and, especially, in the hand), photographs, colour film and sound recordings. Unfortunately, many of the photographs, including some taken on colour film, and the sound recordings can no longer be found and it is assumed that they were either never supplied or were returned after circulation. Current BBRC member David Fairhurst had drawn attention to the single image of the bird in the hand (*Brit. Birds* 58: 346; plate 235), which clearly shows an extensive pale base to the lower mandible, rather than the all-dark bill of Citrine. Independently, D. I. M. Wallace, who saw the bird



Bert Axell

235. Yellow Wagtail *Motacilla flava*, Minsmere, Suffolk, October 1964. The pale base to the lower mandible and dark lores confirm that this is not a Citrine Wagtail *M. citreola*.



236. Yellow Wagtail *Motacilla flava*, Titchwell, Norfolk, October 2009. A putative eastern bird in late autumn. You can view the original submission here: www.britishbirds.co.uk/wp-content/uploads/2014/07/2655.pdf

Andy Stoddart

on 1st November (fig. 2), also contacted BBRC to raise doubts over the identification of this bird, and suggest that it could be an Eastern Yellow Wagtail. There is no doubt that this bird is not a Citrine Wagtail (Hudson *et al.* in prep.), but the evidence currently available is insufficient to assign the bird to the Eastern Yellow Wagtail group on present knowledge. BBRC would be delighted to receive any further information about this bird, especially the sound recording that was made by John Kirby and which could confirm the identification.

5. Titchwell, Norfolk, 17th–22nd October 2009

This late-autumn bird (plate 236) was initially reported as a *flava* but several observers considered that it could be something more interesting, given the late date and images posted on the internet. Andy Stoddart saw the bird on the last day of its stay and managed to compile a field description and some photographs, which were submitted to BBRC. The description included Steve Lister's notes on the call from 17th, which he described as very striking, different from western birds and more like an eastern subspecies. At present BBRC considers that autumn birds in adult-like plumage are not safely acceptable in the absence of sound recordings, but this record is included here to emphasise the value of documenting such birds, and in the hope that future advances in knowledge may enable a conclusive identification (*Brit. Birds* 107: 652).

Conclusions

This paper is intended to summarise the current approach to assessment of vagrant Yellow Wagtails by BBRC. As knowledge evolves, we may gain more insight into the variation within forms and diagnostic features. The current approach is not as conservative as that advocated by Alström & Mild (2003) with regard to vagrants, but will still seem too cautious for some. Indeed, there remains a divergence of views among BBRC members as to how best to approach this challenging subject. Many records provoke much discussion and there is often a sense that conclusions are drawn pragmatically rather than convincingly. However, there is also a concern that records of potentially interesting Yellow Wagtails should not be simply 'lost' and this paper aims to draw attention to some of these examples (of which there are more than space allows for inclusion).

The fact that each of the forms has currently been considered acceptable only in adult male (*feldegg*, *cinereocapilla* and *cinereocapilla* × *iberiae*) or first-winter (Eastern Yellow Wagtail) plumage could well mean that vagrants in other plumages are being overlooked. This, combined with a cautious approach to identification, will undoubtedly result in the true status of these forms in Britain being under-recorded, but as our knowledge of the subject improves then the record books will gradually show a truer reflection of vagrancy patterns. Identification of western forms in non-breeding plumages remains a challenge (Aymí 1999), but with careful documentation, including good-quality sound recordings, it may be possible. Equally, efforts to disentangle the identification characters of the different populations of Eastern Yellow Wagtails in non-adult plumage may enable us to assign vagrant

Table 1. Proposed acceptance criteria for vagrant Yellow Wagtails in Britain. The following list of identification criteria is separated into essential and supporting features.

Black-headed Wagtail *M. f. feldegg*

Essential features

- Glossy black crown (but note that birds without a glossy crown could be accepted if they show greenish feathering in the nape and the call is described accurately)
- No *blue*-grey feathering in the nape
- No white feathering in the supercilium

Supporting features

- A harsh, rasping call. This needs to be described clearly (ideally with a sound recording) to ensure that it is not confused with some of the harsher calls associated with the song or variant alarm calls of nominate *flava.*

Ashy-headed Wagtail *M. f. cinereocapilla*

Essential features

- Dark ashy-grey crown and nape
- Dark ashy-grey to blackish ear-coverts
- Extensive white throat, clearly demarcated from the yellow upper breast
- No white supercilium, or an indistinct pale spot or short line behind the eye
- A harsh, rasping call, reminiscent of *feldegg.* This needs to be described clearly to ensure that it is not confused with some of the harsher calls associated with the song or variant flight calls of nominate *flava.*

Supporting features

- Darker olive-brown upperparts than *flavissima*

Spanish Wagtail *M. f. iberiae*

Essential features

- Dark ashy-grey crown and nape
- Dark ashy-grey to blackish ear-coverts, contrasting with the crown
- Extensive white throat, clearly demarcated from the yellow upper breast
- A complete white supercilium, preferably narrower in front of the eye, broadening behind the eye.
- Darker olive-brown upperparts than *flavissima*
- A harsh, rasping call reminiscent of *feldegg* (as above)

Supporting features

- A longer, stronger bill than *flavissima*, slightly upturned

'Southern Wagtail' *M. f. cinereocapilla x iberiae*

Accepted records of a bird showing intergrade characteristics between Ashy-headed and Spanish Wagtail will also be published. Such features would include:

- Dark ashy-grey crown and nape
- Dark ashy-grey to blackish ear-coverts, contrasting with the crown
- Extensive white throat, clearly demarcated from the yellow upper breast
- A complete white supercilium, broken above the eye or an extensive broad white supercilium behind the eye
- Darker olive-brown upperparts than *flavissima*
- A harsh, rasping call reminiscent of *feldegg* (as above)

Supporting features

- A longer, stronger bill than *flavissima*, slightly upturned
- Any bird suspected of having plumage features or vocalisations suggesting an intergrade with nominate *flava* would not be considered acceptable on present knowledge.

Eastern Yellow Wagtail *M. f. plexa/tschutschensis/taivana/macronyx*

Essential features

- A harsh, rasping call reminiscent of Citrine Wagtail, preferably sound-recorded
- Head pattern and bill coloration that eliminate Citrine Wagtail

Supporting features

- Cold grey-and-white first-winter plumage, lacking yellow in underparts and green tones in upperparts
- DNA evidence
- Long hind claw

individuals to a specific form in the future, even applying new knowledge to previous records where possible. This is feasible only when individual birds are carefully documented by observers and the Committee is very grateful to those who submit detailed records to enable this level of assessment.

BBRC would be grateful for comments on the features proposed within this paper and any new insights that may further our identification knowledge of this attractive group of birds.

Acknowledgments

BBRC is extremely grateful to all the observers who have submitted claims of vagrant Yellow Wagtails for assessment, helping the Committee to develop an approach to considering such claims. We are especially grateful to those observers who have permitted their claims to be used to improve the quality of this article. BBRC members past and present have assisted with the information presented in this paper. Nigel Hudson in particular was very helpful at providing files, Andy Stoddart assisted with some of the provisional text and Brian Small considerably improved the final text. Magnus Robb from The Sound Approach provided useful information on vocalisations and Paul Morton was very helpful with creating links to The Sound Approach's audio database.

References

Alström, P., & Ödeen, A. 2002. Incongruence between mitochondrial DNA, nuclear DNA and non-molecular data in the avian genus *Motacilla*: implications for estimates of species phylogenies. In: Alström, P., *Species Limits and Systematics in Some Passerine Birds*. PhD thesis, Uppsala University.

— & Mild, K. 2003. *Pipits and Wagtails of Europe, Asia and North America*. Christopher Helm, London.

Aymí, R. 1999, Identification of adult male Yellow Wagtails in winter plumage in western Europe. *Dutch Birding* 21: 241–253.

Bartroli, X. 1991. An intermediate population of Italian and Spanish Yellow Wagtails *Motacilla flava cinereocapilla* and *M. f. iberiae* in northeastern Spain. *Ardeola* 38: 199–205.

Bot, S., Groenendijk, D., & van Oosten, H. H. 2014. Eastern Yellow Wagtails in Europe: identification and vocalisations. *Dutch Birding* 36: 295–311.

—, —, Nieuwstraten, E., Ossendorp, F., & Zekhuis, M. 2012. Witkeelkwikstaart bij Makkum in mei 2004. *Dutch Birding* 34: 32–37.

British Ornithologists' Union (BOU). 2011. Records Committee: 39th Report (October 2010). *Ibis* 153: 227–232.

— 2013a. Records Committee: 41st Report (October 2012). *Ibis* 155: 204–207.

— 2013b. The British List: a checklist of birds of Britain (8th edn). *Ibis* 155: 635–676.

Collinson, J. M., Smith, A., Waite, S., & McGowan, R. Y. 2013. British records of 'Eastern Yellow Wagtail'. *Brit. Birds* 106: 36–41.

Corso, A. 2001. Head pattern variation in Black-headed Wagtail. *Birding World* 14: 162–166.

Dubois, P. J. 2001. Les forms nicheuses de la Bergeronnette printanière *Motacilla flava* en France. *Ornithos* 8: 44–73.

Frolet, J-M., & Mezani, S. 2006. Recherche des différentes forms nicheuses de la Bergeronnette printanière *Motacilla flava* en Bourgogne. *Rev. Sci. Bourgogne-Nature* 4: 51–59.

Hellström, M., & Raritetskommittén. 2009. Gulärlor av rasen *feldegg* – Raritetskommitténs återgranskning av det Svenska fyndmaterialet. *Vår Fågelvärld* 4/2009: 32–37.

Hudson, N., & the Rarities Committee. 2013. Report on rare birds in Great Britain in 2012. *Brit. Birds* 106: 570–641.

— & — 2014. Report on rare birds in Great Britain in 2013. *Brit. Birds* 107: 579–653.

— & — In prep. Report on rare birds in Great Britain in 2015. *Brit. Birds* 109.

Kehoe, C. 2006. Racial identification and assessment in Britain: a report from the RIACT subcommittee. *Brit. Birds* 99: 619–645.

Kristensen, A. B., Frich, A. S., Ortvad, T. E., & Schwalbe, M. 2009. Sjældne fugle I Danmark og Grønland i 2009. Rapport nr. 40 fra Sjældenhedsudvalget **www.dof.dk/images/udvalg/su/dokumenter/su_rapporter/dk_rc2009.pdf**

Langenberg, J., & Langenberg, T. 2009. [Plumage variation in Ashy-headed Yellow Wagtails *Motacilla cinereocapilla*.] *Otus* 1: 11–17. (In German)

Mayaud, N. 1949. The races of *Motacilla flava* breeding in France. *Ibis* 91: 171–172.

Ödeen, A. 2001. Radiation, loss of sexual traits and convergent evolution in Yellow Wagtails (*Motacilla flava L.*). In Ödeen, A. *Effects of Post-glacial Range Expansions and Population Bottlenecks on Species Richness*. PhD thesis. Uppsala University.

— & Alström, P. 2001. Evolution of secondary sexual traits in wagtails (genus *Motacilla*). In: Ödeen, A., *Effects of Post-glacial Range Expansions and Population Bottlenecks on Species Richness*. PhD thesis, Uppsala University.

— & Björkland, M. 2003. Dynamics in the evolution of sexual traits: losses and gains, radiation and convergence in Yellow Wagtails (*Motacilla flava*). *Molecular Ecology* 12: 2113–2130.

Olsen, T. A. 2009. Oppsummering av NSKFs mote i November 2009 **www.birdlife.no/organisasjonen/nyheter/?id=509**

Pavlova, A., Zink, R. M., Drovetski, S. V., Red'kin, Y., & Rohwer, S. 2003. Phylogeographic patterns in *Motacilla flava* and *Motacilla citreola*: species limits and population history. *Auk* 120: 744–758.

Red'kin, Y. A. 2001. [A new suggestion on taxonomical structure of 'Yellow Wagtails' group.] In: Kurochkin, E., & Rakjimov, I. (eds.), [Achievements and problems of ornithology of northern Eurasia on a boundary of centuries], Proc. Int. Conf. Urgent problems of birds' study and protection in East Europe and northern Asia. (In Russian)

— & Babenko, V. G. 1999. [Data on distribution and systematics of Yellow Wagtail forms (subgenus *Budytes*) in Russian Far East (Amur region).] *Russ. Orn. Zhurn.* Express-issue 85: 3–28. (In Russian)

Rowlands, A. 2003. 'Black-headed Wagtail' in Essex in 1999 – a suspected *feldegg* intergrade.

Brit. Birds 96: 291–296.
Schweizer, M. 2005. Hybridization between Blue-headed Wagtail and Ashy-headed Wagtail in Switzerland. *Dutch Birding* 27: 235–241.
Stoddart, A. In prep. BBRC and hybrids. *Brit. Birds.*
van den Berg, A. 2011. Breeding status of Ashy-headed Wagtail in south-western Morocco. *Dutch Birding* 33: 117–121.
— & Oreel, G. J. 1985. Field identification and status of black-headed Yellow Wagtails in western Europe. *Brit. Birds* 78: 176–183.
Williamson, K. 1955. Migrational drift and the Yellow Wagtail complex. *Brit. Birds* 48: 382–403.

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Notes

Cooperative attacks by urban Peregrines on Common Buzzards: an update

Dixon & Gibbs (2015a) described the highly aggressive territorial behaviour shown by a pair of Peregrine Falcons *Falco peregrinus* nesting in Exeter city centre towards Common Buzzards *Buteo buteo* passing over the city. This note updates the original paper (which see for further details of the study) with observations from 2015.

During 2015, watches were undertaken regularly in periods of good weather, mainly between 10.00 and 16.00 hrs, when the majority of attacks have occurred. Our own observations were supported by those from a growing number of other sources (see acknowledgments), which led to an unprecedented number of attacks being recorded.

Seasonal observations throughout 2015

In 2015, a total of 217 attacks on Buzzards over the city were recorded, with over 50% involving the Peregrines working cooperatively, resulting in 26 Buzzards being knocked to the ground, or 'downed' (table 1). This staggering figure reflects several factors: the many watches were undertaken during periods of good weather; an increase in reported attacks due to heightened local awareness of this behaviour; and also very high numbers of individual Buzzards overflying the city in most months.

The year began with two attacks observed in January, both in periods of good weather, and of particular interest since territorial

Table 1. Monthly totals of attacks by Peregrine Falcons *Falco peregrinus* on Common Buzzards *Buteo buteo* observed over Exeter during 2015.

	no. of attacks	pair	female	male	reported attack, details unknown	no. Buzzards downed
January	2	1	–	1	–	–
February	3	3	–	–	–	–
March	14	8	–	5	1	–
April	26	3	6	14	3	–
May	60	41	13	3	3	12
June	85	50	32	1	2	9
July	9	4	4	1	–	1
August	4	3	–	–	1	1
September	11	7	3	1	–	3
October	3	1	1	–	1	–
November	–	–	–	–	–	–
December	–	–	–	–	–	–
Total	217	121	59	26	11	26

behaviour had not previously been observed during the winter months. On fine days in February, three attacks were seen, each by the pair working cooperatively. In winter, the Peregrines tend to be quite sedentary but with pair-bond reinforcement prior to the breeding season, levels of activity tend to increase. In March, the pair began to exhibit patrolling behaviour, spending time soaring high above the nest site. On days of sun and high winds, 14 Buzzards were attacked, eight by the pair working in tandem. Egg-laying began on 22nd March.

In April, 26 attacks were observed, but only three by the pair, since incubation of a clutch of four eggs was under way. The female was observed to make six solo attacks on Buzzards, the male 14. April is the only month in the year when solo attacks by the male exceed those of the female, which undertakes the majority of incubation duties. The male, often perched close to the nestbox, appeared to be caught between the drive to attack an intruder and remaining close to the nest, and as a consequence some Buzzards were not attacked. However, on occasions when he did defend the territory, his alarm-calling prompted the female to join him and she left the eggs unattended for up to six minutes while the pair dealt with an intruding Buzzard. In early May, the eggs hatched and the young chicks required constant brooding for the first 14 days, which again meant that the female devoted less time to territory defence.

Subsequently, better weather conditions brought high numbers of Buzzards over the city, resulting in more attacks. In previous years, May is the month when the Peregrines are at their most aggressive towards Buzzards, and many hours are spent soaring 'on patrol' over the territory. In May 2015, 60 attacks were observed, with 41 (68%) by the pair. Twelve Buzzards were seen knocked from the sky, two by the female alone.

Passage Buzzards peaked in June, with 85 observed attacks, 50 (59%) by the pair. Nine Buzzards were downed, all by the falcons working cooperatively. The juvenile Peregrines fledged on 11th and 16th June, and spent the rest of the month becoming increasingly adept in flight. During July and August, the juveniles were taught to catch prey and hunt, but attacks on Buzzards still continued, with nine and four respectively, and single Buzzards were knocked down in each month.

The juveniles became increasingly independent during the autumn, spending more time away from the city but returning occasionally for food. Good weather during September resulted in an increase in passage Buzzards, and 11 observed attacks, seven by the pair, and three downed Buzzards. The

Table 2. Totals of observed attacks by Peregrine Falcons *Falco peregrinus* on Common Buzzards *Buteo buteo* in Exeter (2009–15).

	no. of attacks	pair	female	male	reported attack, details unknown	outcome of observed attacks	
						downed	driven off/unseen
2009	1		1				1
2010	1	1					1
2011	3	3					3
2012	10	7		3		4	6
2013	45	38	1	4	2	10	35
2014	43	32	7	3	1	3	40
2015	217	121	59	26	11	26	191
Total	320	202	68	36	14	43	277

juveniles had dispersed by October, in which month the last three attacks of 2015 were recorded.

The total of 217 recorded attacks on Buzzards by the Exeter Peregrines in 2015 is more than double that recorded over the previous six years combined (table 2). Our observations of attacks in 2015 and the locations of downed Buzzards confirm that there is a far greater likelihood of a Buzzard being knocked down if it is passing within 1 km of the church.

Discussion

Given the number of attacks in 2015, it is perhaps unsurprising that we have observed some new and interesting trends in this behaviour.

The most attacks in a single day occurred during a watch from 09.15 to 17.15 hrs on 7th June, when we observed 13

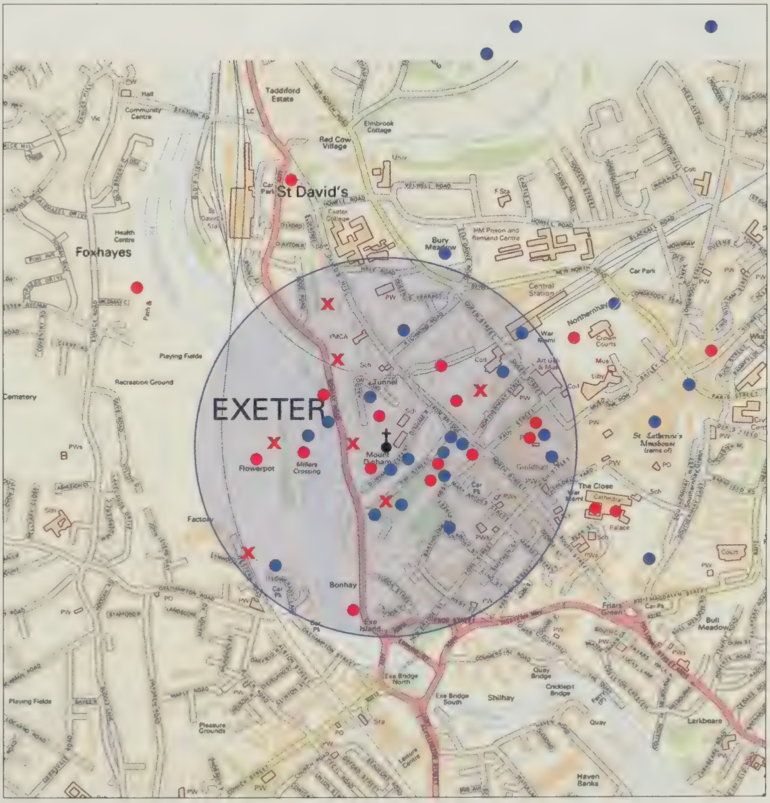

Fig. 1. Map of Exeter city centre showing the locations of all downed Common Buzzards *Buteo buteo* described in the text. The map is a 2 km x 2 km square, centred on the nest site on St Michael and All Angels Church, Mount Dinham, and the blue circle shows a radius of 500 m from the church. Red markers show Buzzards downed in 2012–2014 (dots indicate birds located, crosses indicate birds downed but not located), blue dots show Buzzards downed in 2015.

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James Clews

237. An attack on a passing Common Buzzard *Buteo buteo* by one of the Exeter Peregrine Falcons *Falco peregrinus*, June 2015.

attacks on Buzzards, one being knocked to the ground just 185 m from the church. The female Peregrine was on the wing for six hours and 25 minutes during that watch.

On the same day, we observed two territorial interactions with Red Kites *Milvus milvus*, one of which involved the female Peregrine stooping onto a kite that was carrying prey. The Red Kite dropped what appeared to be a small mammal, which was caught in the air at the second attempt by the female; she passed it to the male in flight, which returned to the church to cache the prey, and immediately rejoined the female high over the city. This was the first observation of kleptoparasitism by the Exeter Peregrines (Dixon & Gibbs 2015b).

On two separate occasions, the female undertook solo attacks on single Buzzards which resulted in the Buzzard being downed. Prior to 2015, downed Buzzards have always been seen as the result of cooperative attacks.

In 2015, we recorded the latest time of an attack, 18.15 hrs on 6th June, and also the longest pursuit by a Peregrine in order to attack a Buzzard, a high-flying bird drifting slowly north on 16th June. The female took fully ten minutes to get from the church to a position above the soaring Buzzard, her flight path alternating between climbing in tight circles to gain height and bouts of fast, flapping flight into the wind to gain an attack position; she then made several stoops, driving the Buzzard away to the north. This represented an extraordinary level of energy expenditure given the minimal threat posed.

Typically, individual Buzzards are seen above Exeter but during several sunny days in spring and summer 2015, two or occasionally three Buzzards were observed passing over the city together. In response, the Peregrines would attack one Buzzard and drive it off before immediately moving on the next bird and repeating the process.

In late summer, when the juveniles spend more time away from the church, we noted situations when Buzzards close to the church were tolerated by the adults. Attacks were more likely when the juveniles were present. As in previous years, there were occasions when the juveniles excitedly followed their parents during attacks on Buzzards.

While many Peregrine workers across the UK may observe occasional territorial interactions between these two species, we are aware of only three other instances during 2009–15 where a Buzzard has been intentionally downed following a Peregrine attack. These occurred at an urban site in Sussex in May 2012 (Janet Shaw pers. comm.); at a quarry in Devon in June 2015 (Mark Darlaston pers. comm.); and at a natural cliff site in Avon in July 2015 (Richard Scantlebury pers. comm.). Each of these appears to be a 'one-off' incident, lacking the intensity, repetition and cooperative nature of many of the attacks shown by the Exeter Peregrines. We shall continue to monitor the Exeter Peregrines and would be pleased to hear of any similar observations from other parts of the country.

Acknowledgments

We are indebted to all those who have submitted records of attacks and information during this period, and to photographers for allowing us to use their images. In 2015 we were joined occasionally by experienced Peregrine workers and members of Raptor Study Groups from Buckinghamshire, Cornwall, Devon, Dorset, Gloucestershire and Lincolnshire. Our monitoring efforts have also been boosted by establishing the 'Exeter University Peregrine Group', made up of undergraduates who undertake watches with us or in our absence. Further information came from local residents and members of the Devon Wildlife Trust and the RSPB.

References

Dixon, N., & Gibbs, A. 2015a. Cooperative attacks by urban Peregrines on Common Buzzards. *Brit. Birds* 108: 253–263.

— & — 2015b. Territorial aggression shown by urban Peregrine Falcons towards Common Buzzards. *Devon Birds* 68(2): 13–20.

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Gulls eating Hawthorn berries

In late October 2015, many gulls were feeding on fields of winter wheat near my house in Northamptonshire. On 23rd October, around 40–50 Black-headed Gulls *Chroicocephalus ridibundus* and 12–20 Common Gulls *Larus canus* were repeatedly circling one particular spot and as they approached the hedge dividing two wheat fields they would hover for several seconds before dropping over the hedge. This occurred at a place where there were several tall Hawthorn *Crataegus monogyna* bushes and I assumed that the birds were interested in something on the other side of the hedge. When I managed to look down that side of the hedge, however, I could see that they were plucking the Hawthorn berries from the bushes. Both species were feeding this way, adult birds and a few first-years of both species. The behaviour continued for several minutes while I watched.

Observations of Black-headed Gulls feeding in this way on both Hawthorn berries and acorns have been reported before in *BB* (Gorton 1957; Harrison 1957; Butlin 1961; Spencer 1961), while Harris (1961) described Common and Lesser Black-backed Gulls *L. fuscus* and Arctic Skuas *Stercorarius parasiticus* feeding on whinberries [Bilberries *Vaccinium myrtillus*] and Crowberries *Empetrum nigrum* in northern Norway.

References

Butlin, S. M. 1961. Black-headed Gulls taking acorns. *Brit. Birds* 54: 118.

Gorton, E. 1957. Black-headed Gulls feeding on hawthorn berries. *Brit. Birds* 50: 347.

Harris, M. P. 1961. Gulls and Arctic Skuas feeding on berries. *Brit. Birds* 54: 430.

Harrison, R. 1957. Black-headed Gulls feeding on hawthorn berries. *Brit. Birds* 50: 75.

Spencer, K. G. 1961. Black-headed Gulls eating hawthorn berries and acorns. *Brit. Birds* 54: 130.

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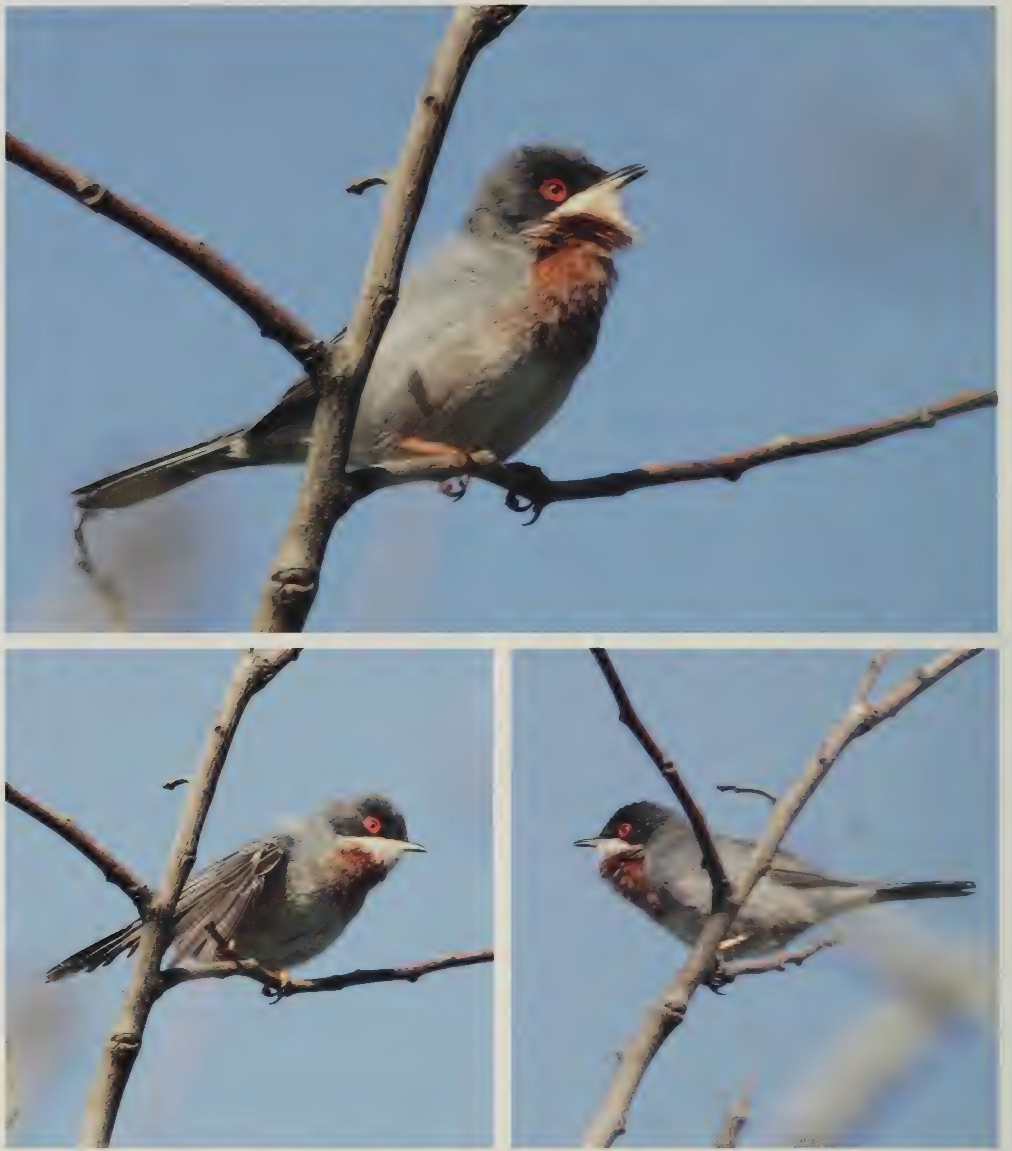
Apparent hybrid Sardinian x Subalpine Warbler in Spain

On 23rd March 2016, I photographed a *Sylvia* warbler at Alcollarín, Caceres, Extremadura, Spain. The bird appeared to be an adult male Sardinian Warbler *S. melanocephala* × Subalpine Warbler *S. cantillans*, a hybrid pairing not previously reported in the literature (e.g. Shirihai *et al.* 2001; McCarthy 2006) or online.

The appearance of the bird was overall rather similar to Sardinian Warbler, with the exception of the brick-red breast and lower throat, and the diffusely grey nape/crown. Leg colour was perhaps closer to Subalpine Warbler. The relatively long outermost primary, extending beyond the tip of the primary coverts, is a feature associated with



Antonio Calvo

238–240. Apparent hybrid male Sardinian Warbler *S. melanocephala* x Subalpine Warbler *S. cantillans*, Extremadura, Spain, March 2016.

Sardinian Warbler; in Subalpine Warbler it is generally closer in length to or even slightly shorter than the longest primary covert (Shirihai *et al.* 2001).

The bird was singing from the top of a tree. The song was similar to that of Sardinian Warbler but subtly different to my ear. The habitat in which I saw the bird – olive groves with mixed low scrub and grassland close to a river – is used by both resident Sardinian Warblers and migrant Subalpine Warblers in spring.

References

McCarthy, E. M. 2006. *Handbook of Avian Hybrids of the World.* OUP, Oxford.

Shirihai, H., Gargallo, G., Helbig, A., Harris, A., & Cottridge, D. 2001. Sylvia *Warblers: identification, taxonomy and phylogeny of the genus* Sylvia. Christopher Helm, London.

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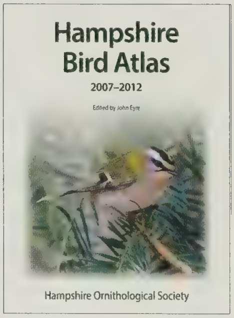
Reviews

Hampshire Bird Atlas 2007–12

Edited by John Eyre
Hampshire Ornithological Society, 2015
Hbk, 448pp; full colour throughout
ISBN 978-0-9567712-6-1
£35.00



This large-format atlas is the first publication to map the year-round distribution of Hampshire's birds. It follows and complements previous works on the birds of Hampshire, dating back to Gilbert White in the eighteenth century. John Eyre has a long association with ornithology in the county and co-authored *Birds of Hampshire* (Clark & Eyre 1993), which included the results of the first (breeding) bird atlas of Hampshire, covering 1986–91. John was part of a team of 14 supporting and driving this project, which has the twin benefits of being under the umbrella of the national *Bird Atlas 2007–11* and also a previous tetrad-based survey with which comparisons can be made.

Immediate impressions are of a monumental and thorough piece of work. The mix of (mainly) good-quality photographs, maps and text is appealing. About 1,200 observers took part in the survey and they should be proud of their contribution and the end product.

As with most books of this type, introductory chapters describe the methodology and the habitats in the county. Hampshire is blessed with a wide range of habitats, and the habitat chapter, written by Peter Thompson, is particularly good. It includes detailed maps showing the geology and some key habitats and the text describes some species typical of the habitats described. Recent atlases are all about change, and the changes in habitats and the issues they face in the twenty-first century are prominent in this chapter. Understanding this background is important in the interpretation of the maps in the species accounts.

The species accounts take up most of the book; they are readable and instructive, and most species occupy a double-page spread. Photographs add to the overall appeal of the book but in some cases have been reproduced at a larger scale than their quality dictates. There are up to three maps: breeding distribution, winter distribution and a change map (for the breeding season only). Where counts were available from TTVs (Timed Tetrad Visits), these are shown by means of three different-sized dots within the coloured square for each tetrad, indicating relative abundance. Although they report exactly what was recorded, I found these dots added little to the maps, but they do not distract from the underlying distributions shown. Each map also includes the total number of tetrads where the species was recorded. The winter maps show presence during the five-year survey period, each occupied tetrad being shown in blue. There are two shades of green used in the breeding maps: darker green, where 'breeding was considered likely', and paler green, for areas where a species was present but considered not to be breeding. In this aspect, the HBA differs from most other atlases, although the same approach was adopted by the Norfolk Atlas (Taylor & Marchant 2011). This neatly addresses the concern that, while recording of all categories of breeding evidence was encouraged, the evidence submitted was less comprehensive than in the 1986–91 atlas. An assessment of breeding likelihood was based on a combination of evidence gathered, the species and the collective local experience of a small group of individuals (this is documented fully in an appendix). The same rules were applied to the earlier survey to allow valid comparisons.

The change maps show tetrads occupied in both atlases in a third shade of green with prominent red squares for losses and dark green squares for gains (to avoid potential problems with red/green colour blindness, white plus and minus signs are also used). These maps work well and convey an immediate impression of the changing breeding status of each species.

What of the findings? As with most local atlases, many of the findings reinforce the key messages documented in *Bird Atlas 2007–11*, such as the decline in southern England of most breeding wader species, Turtle Dove *Streptopelia*

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turtur, Common Cuckoo *Cuculus canorus*, Lesser Spotted Woodpecker *Dendrocopos minor*, Willow Tit *Poecile montana* and Spotted Flycatcher *Muscicapa striata*, and the increase in range of Common Buzzard *Buteo buteo* and Peregrine Falcon *Falco peregrinus*. There are actually few species showing increases, but two of these are Firecrest *Regulus ignicapilla* and Cetti's Warbler *Cettia cetti*. A table of species in order of relative change would have been a useful addition. The decline of the House Martin *Delichon urbicum* is a striking example. Although breeding was recorded in 625 tetrads, and the map shows what is still a wide distribution, the species was lost from a net total of 276 tetrads, with losses from urban and rural areas alike. Possible reasons for this decline are suggested in the text. Another aspect that surprised me was the disproportionate loss of breeding range of several species from the New Forest area, including Hobby *Falco subbuteo*, Common Whitethroat *Sylvia communis* and Yellowhammer *Emberiza citrinella*. It is good to see that possible explanations of these changes are offered, although there is often no direct evidence of the causes involved. It is, however, one of the values of county tetrad atlases that such local changes can be highlighted. The texts are interesting and detailed, including other information such as local counts, but there are virtually no graphs and little in the way of analysis of bird distributions compared with key environmental features. In these points, HBA is typical of most modern atlases. No attempt is made to update population sizes estimated in *Birds of Hampshire*.

Rare and scarce species recorded during the fieldwork periods of the survey are documented within the main species accounts, with historical status where relevant. Other species recorded in Hampshire in 2007–12, but outside of the recording months of November to February and April to July, are listed separately at the end of the species accounts, plus a list of escapes and other species recorded during the same period. These inclusions make the book more complete, although records of the escapes that bred in the county in that period (Black Swan *Cygnus atratus* and Speckled Teal *Anas flavirostris*) might have been dealt with more fully. These are potentially significant records and become rather lost at the back of the book.

As with all local atlases, I admire the huge effort that has gone into the fieldwork, data preparation and writing by truly dedicated volunteers. This is essential reading for those who know Hampshire and those interested in bird distributions.

Mark Holling

The Birds of Exmoor and the Quantocks 2nd edn

By David Ballance, Brian Gibbs and Roger Butcher
Privately published, 2016
Pbk, 276pp; 33 colour photographs, 19 drawings, fold-out map
ISBN 978-0-9552787-7-8
£15.00 inc. P&P from David Ballance, tel. (01643) 706820

This second edition is some 30% longer than the first (see *Brit. Birds* 96: 658). The introduction, describing the landscape and birds, has been expanded and updated to take account of the changes in both – for example, the rewatering of parts of the moor, to prevent flooding lower down, may benefit some species, such as Common Snipe *Gallinago gallinago*. The section on 'Ornithology' has been largely rewritten and expanded, to include results of the full moorland bird surveys coordinated by the RSPB in 2002, 2008 and 2014 on Exmoor and in 2006 and 2012 in the Quantocks. The Systematic List has benefited greatly from the results of *Bird Atlas 2007–11*. Red Grouse *Lagopus lagopus* have disappeared from the area, and the same is probably true of Merlin *Falco columbarius* and Ring Ouzel *Turdus torquatus*; while the Dartford Warbler *Sylvia undata* hangs on only at the coast. Two species, Red Kite *Milvus milvus* and Northern Goshawk *Accipiter gentilis*, have been gained as breeding species. A new feature is the inclusion of 'Special Places', chosen and written by eight local residents, which cover a range of sites including private gardens, the coast, moorland and villages.

The rapid changes in bird populations make updates in local and regional avifaunas important and this volume upholds the standard set by the first edition.

David Warden

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Recent reports

Compiled by Barry Nightingale and Harry Hussey

This summary of unchecked reports covers early May to early June 2016.

Headlines An extravaganza of rarities made the headlines during this period, the highlight being Britain's second Green Warbler, which made landfall on Unst, in Shetland. Other notable vagrants seen in Shetland included Calandra Lark, Eastern Olivaceous Warbler and Collared Flycatcher, while a Black-browed Albatross that spent a morning around Fair Isle was probably the regular North Sea bird wandering from its preferred German haunts. The Outer Hebrides responded with a (widely twitched) Black-billed Cuckoo and a White-crowned Sparrow, while there was a White-throated Sparrow on Tiree and a Semipalmated Plover in Co. Wexford. In the southwest, a Lammergeier created considerable angst among its would-be observers, first as they tried to track it down in Devon and Cornwall, second through the heated debate on its potential origins. In Wales, a Blyth's Pipit on Bardsey was most unexpected, a Black-headed Bunting on Skomer a little more predictable. Along the south coast, a Cliff Swallow, a Stilt Sandpiper and a 'Caspian Stonechat' were discovered in Hampshire, a Laughing Gull was tracked from Sussex to Kent and a Great Spotted Cuckoo lingered in Dorset. In the east, a Franklin's Gull in Essex, and a Pallid Swift and a brief Black-eared Wheatear in Norfolk were among the highlights. In addition, there were widespread arrivals of Little Bitterns, Purple Herons, Glossy Ibises, Gull-billed and Whiskered Terns, Red-footed Falcons, European Bee-eaters, Greenish and Subalpine Warblers and Red-breasted Flycatchers.

Blue-winged Teal *Anas discors* Carlton Marshes (Suffolk), 6th–7th June. **Ferruginous Duck** *Aythya nyroca* Washington (Co. Durham), long-stayer to 9th June. **Lesser Scaup** *Aythya affinis* Lower Lough Erne (Co. Fermanagh), 7th–8th June. **King Eider** *Somateria spectabilis* Long-stayers Achiltibuie (Highland) to 4th June, Musselburgh (Lothian) to 9th June, and Ythan Estuary (North-east Scotland), to 9th June; also Inishmurray (Co. Sligo), 22nd May. **Surf Scoter** *Melanitta perspicillata* Long-stayers in Lothian, Shetland and Yorkshire.

White-billed Diver *Gavia adamsii* Yell (Shetland), long-stayer throughout. Tory Island (Co. Donegal), three, 9th–12th May, one to 13th; Portsoy (North-east Scotland), 10th–12th May; Burghead (Moray & Nairn), 12th May; Eshaness (Shetland), 13th May; Barra, 18th May and 5th June, North Uist (both Outer Hebrides), 18th and 30th May; North Ronaldsay (Orkney), 18th and 28th May; Lewis (Outer Hebrides), 29th May.

Black-browed Albatross *Thalassarche melanophris* Fair Isle, 28th May. **Fea's Petrel** *Pterodroma feae* Flamborough Head (Yorkshire), 14th May. **Dalmatian Pelican** *Pelecanus crispus* Drift Resr and nearby sites (Cornwall), long-stayer to 10th June.

Steve Arlow

241. Black-browed Albatross *Thalassarche melanophris*, Fair Isle, May 2016.

Little Bittern *Ixobrychus minutus* Ipplepen (Devon), 26th May; London Wetland Centre (Greater London), 29th May to 3rd June; Old Moor (Yorkshire), 4th–10th June; Trimley Marshes (Suffolk), 7th–8th June. **Night Heron** *Nycticorax nyticorax* Records from Co. Down, Kent, Lancashire & N Merseyside, Somerset and Yorkshire. **Squacco Heron** *Ardeola ralloides* Ogmore-by-Sea (East Glamorgan), 29th May. **Cattle Egret** *Bubulcus ibis* Records from Cornwall, Suffolk and Co. Wexford. **Purple Heron** *Ardea purpurea* Records from Cornwall, Devon, Essex, Kent, Leicestershire & Rutland, Nottinghamshire, Scilly and Suffolk. **Glossy Ibis** *Plegadis falcinellus* Widespread, with records from Angus & Dundee (two), Co. Antrim, Co. Cork (two), Dorset, Co. Dublin (two), Essex/Greater London, Gloucestershire, Highland (two), Kent, Co. Kerry, Co. Kilkenny (two), Lancashire & N Merseyside, Lincolnshire, Norfolk (two), Nottinghamshire, Somerset, Suffolk (three), Co. Wexford (eight) and Yorkshire (two).

Pied-billed Grebe *Podilymbus podiceps* Loch Feorlin (Argyll), long-stayer to 9th May.

Black Kite *Milvus migrans* Records from Anglesey, Argyll, Caernarfonshire, Cambridgeshire, Cleveland, Cornwall, Cumbria, Essex, Co. Kerry, Greater London, Kent, Lancashire & N Merseyside, Suffolk, Sussex and Co. Wexford (two). **Lammergeier** *Gypaetus barbatus* Sudbrook (Gwent), 19th May, same Dartmoor/Postbridge (Devon), 20th–29th May, and Breney Common/Rosenannon (Cornwall), 23rd–24th May. **Pallid Harrier** *Circus macrourus* Kerry Airport (Co. Kerry), 9th May.

Black-winged Stilt *Himantopus himantopus* Records from Dorset, Essex (two) and Suffolk. **American Golden Plover** *Pluvialis dominica* Tacumshin (Co. Wexford), 14th–15th May, and 6th–7th June; Kilcoole (Co. Wicklow), 15th May; Rye Harbour (Sussex), 3rd–5th June. **Pacific Golden Plover** *Pluvialis fulva* Lough Swilly (Co. Donegal), 11th May; Slains (North-east Scotland), 21st–22nd May. **Semipalmated Plover** *Charadrius semipalmatus* Tacumshin, 11th May and 3rd–7th June. **Kentish Plover** *Anarhynchus alexandrinus* Records from Essex, Suffolk, Sussex and Co. Wicklow. **Broad-billed Sandpiper** *Calidris falcinellus* Frampton Marsh (Lincolnshire), 12th–14th May; Hale (Cheshire & Wirral), 12th–13th May; Druridge Pools (Northumberland), 31st May; Brandon Marsh (Warwickshire), 2nd June. **Stilt Sandpiper** *Calidris himantopus* Pennington Marshes (Hampshire), 22nd–23rd May. **Buff-breasted Sandpiper** *Calidris subruficollis* Lewis, 29th May; Hickling Broad (Norfolk), 10th June. **Red-necked Phalarope** *Phalaropus lobatus* Records from Lincolnshire, Northamptonshire, Northumberland, Nottinghamshire, Orkney and Yorkshire. **Terek Sandpiper** *Xenus cinereus* Ynys-Hir (Ceredigion), 9th May. **Spotted Sandpiper** *Actitis macularius* Findhorn Bay (Moray & Nairn), 16th May; St Mary's (Scilly), 17th–23rd May. **Lesser Yellowlegs** *Tringa flavipes* Foula (Shetland), 15th–18th May. **Collared Pratincole** *Glareola pratincola* Rainham Marshes (Essex/Greater London), 10th May.

Gull-billed Tern *Gelochelidon nilotica* Skomer (Pembrokeshire), 9th May; Belhaven (Lothian), 29th May; Praa Sands (Cornwall), 18th May; Loughor (East Glamorgan), 18th–21st May; Dungeness (Kent), 21st–22nd May; Tyninghame Bay (Lothian), 3rd–4th June, same Kinneil Lagoon (Forth), 3rd–9th June; Kenfig (East Glamorgan), 5th June; Shapwick Heath (Somerset), 5th June. **Caspian Tern** *Hydroprogne caspia* Portbury (Somerset), two, 11th May; Rossall Point (Lancashire & N Merseyside), 12th May; Graemeshall (Orkney), 3rd June; Long Eaton GP (Derbyshire), 5th June. **Whiskered Tern** *Chlidonias hybrida* Saltholme (Cleveland), two long-stayers to 22nd May; Oldbury (Gloucestershire), 10th May; Brading (Isle of Wight), 6th June; Trimley Marshes, 7th–9th June. **White-winged Black Tern** *Chlidonias leucopterus* Records from Cambridgeshire (two or three), Kent, Outer Hebrides, Pembrokeshire, Shetland and Warwickshire (two). **Forster's Tern** *Sterna forsteri* Doorus (Co. Galway), 28th May. **Bonaparte's Gull** *Chroicocephalus philadelphia* Llanelli (Carmarthenshire), 12th–15th May; Wansbeck Estuary/Castle Island (Northumberland), 24th May to 10th June. **Laughing Gull** *Larus atricilla* Hastings

(Sussex), 25th May, same Dungeness, 26th May and 2nd June; Old Moor, 25th May; Orfordness (Suffolk), 30th May. **Franklin's Gull** *Larus pipixcan* Abberton Resr (Essex), 9th–13th May.

Alan Curry

242. Black-billed Cuckoo *Coccyzus erythropthalmus*, North Uist, Outer Hebrides, May 2016.

Oriental Turtle Dove *Streptopelia orientalis* Otford (Kent), long-stayer to 12th May. **Great Spotted Cuckoo** *Clamator glandarius* Portland (Dorset), 13th May to 10th June. **Black-billed Cuckoo** *Coccyzus erythropthalmus* North Uist, 22nd–31st May. **Snowy Owl** *Bubo scandiacus* Tresco, Bryher and other islands (Scilly), long-stayer to 18th May; Lewis, found dead 27th May. **Alpine Swift** *Apus melba* Framingham Earl (Norfolk), 11th May; St Mary's, 1st–5th June. **Pallid Swift** *Apus pallidus* Blakeney (Norfolk), 12th May. **European Bee-eater** *Merops apiaster* Records from Cornwall (two), Devon, Dorset (two), Greater London, Kent (three), Norfolk, Somerset, Suffolk (two) and Yorkshire (two). **Red-footed Falcon** *Falco vespertinus* Records from Cambridgeshire, Dorset, Essex, Lincolnshire, Suffolk (two), Wiltshire and Yorkshire (up to five).

Woodchat Shrike *Lanius senator* Long-stayers Cornwall (two) and Scilly (two), with new arrivals Co. Cork, Devon (two), Fair Isle, Pembrokeshire and Scilly. **Short-toed Lark** *Calandrella brachydactyla* Records from Ceredigion, Co. Cork, Dorset, Norfolk and Northumberland. **Calandra Lark** *Melanocorypha calandra* Fair Isle, 10th–13th May. **Red-rumped Swallow** *Cecropis daurica* Records from Dorset, Co. Down, Kent (two), Lincolnshire, Scilly (three) and Sussex (two). **Cliff Swallow** *Petrochelidon pyrrhonota* Needs Ore (Hampshire), 3rd June.

Green Warbler *Phylloscopus nitidus* Unst (Shetland), 12th–15th May. **Greenish Warbler** *Phylloscopus trochiloides* Bardsey (Caernarfonshire), two, 28th May, one to 29th, another 5th June; Gunton (Suffolk), 31st May to 3rd June; Kingsgate (Kent), 1st June; Walton-on-the-Naze (Essex), 4th June; Whalsay (Shetland), 5th June; Scarborough (Yorkshire), 7th June. **Dusky Warbler** *Phylloscopus fuscatus* Walney Island (Cumbria), 14th May. **Western Bonelli's Warbler** *Phylloscopus bonelli* Portland Bill, 11th May. **Iberian Chiffchaff** *Phylloscopus ibericus* Tresco, long-stayer to 9th June; Barnes (Greater London), 13th–22nd May. **Sardinian Warbler** *Sylvia melanocephala* Spurn (Yorkshire), 16th May. **Subalpine Warbler** *Sylvia cantillans* At least 23, with 15 arriving during 9th–14th May. Records from Argyll, Caernarfonshire, Cheshire & Wirral, Cornwall, Fair Isle (four), Fife, Isle of Man, Northumberland (two), Outer Hebrides, Pembrokeshire (two), Scilly (three) and Shetland (five). **Savi's Warbler** *Locustella luscinioides* Minsmere (Suffolk), long-stayer to 24th May; also Newcastle (Co. Wicklow), 19th–27th May; Sumburgh (Shetland), 22nd May; Blacktoft Sands (Yorkshire), 23rd May to 5th June; Newport

Roger Riddington

243. Green Warbler *Phylloscopus nitidus*, Unst, Shetland, May 2016.

Wetlands (Gwent), 29th May to 4th June. **Eastern Olivaceous Warbler** *Iduna pallida* Scatness (Shetland), 29th May to 6th June. **Melodious Warbler** *Hippolais polyglotta* St Mary's, 9th–11th May, Gugh, 11th May, St Agnes (all Scilly), 24th May; Spurn, 30th May. **Paddyfield Warbler** *Acrocephalus agricola* St Abb's Head (Borders), 5th June. **Great Reed Warbler** *Acrocephalus arundinaceus* Netherfield Lagoons (Nottinghamshire), 9th May; Willington GP (Derbyshire), 9th May; St Mary's, 10th–13th May; Saltholme, 11th–15th May; Paxton Pits (Cambridgeshire), 14th May to 10th June; Water's Edge CP (Lincolnshire), 5th–6th June.

Rose-coloured Starling *Pastor roseus* Caddington (Bedfordshire), 2nd–6th June. **Thrush Nightingale** *Luscinia luscinia* Isle of May (Fife), 10th–12th May; Farne Islands 10th–11th May; Holy Island (both Northumberland), 12th May. **Red-breasted Flycatcher** *Ficedula parva* Records from Caernarfonshire, Fair Isle, Fife (two), Hampshire, Norfolk (two), Orkney, Outer Hebrides and Yorkshire. **Collared Flycatcher** *Ficedula albicollis* Fair Isle, 23rd May. **'Caspian Stonechat'** *Saxicola maurus variegatus* Titchfield Haven (Hampshire), 10th–11th May. **Black-eared Wheatear** *Oenanthe hispanica* Cart Gap (Norfolk), 28th May.

Citrine Wagtail *Motacilla citreola* Isle of May, 10th–11th May; Seaton Carew (Cleveland), 10th May; Spurn, 11th May. **Blyth's Pipit** *Anthus godlewskii* Bardsey, 11th May. **Red-throated Pipit** *Anthus cervinus* Deerness (Orkney), 13th May; Fair Isle, 14th and 22nd May; Bryher, 14th May; Galley Head (Co. Cork), 2nd June.

White-throated Sparrow *Zonotrichia albicollis* Tiree (Argyll), 10th June. **White-crowned Sparrow** *Zonotrichia leucophrys* Lewis, 31st May. **Black-headed Bunting** *Emberiza melanocephala* Skomer, 24th May. **Rustic Bunting** *Emberiza rustica* Fair Isle, 13th and 27th May.

Rory Tallack

244. Male Western Subalpine Warbler *Sylvia cantillans iberiae/inornata*, Foula, Shetland, May 2016.

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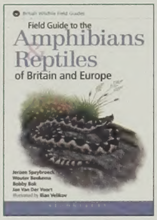

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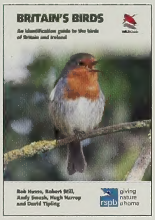

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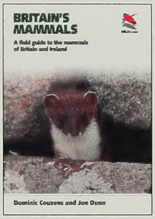

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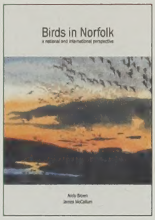

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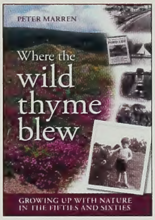

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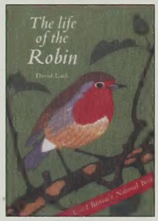

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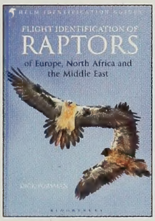

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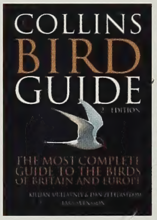

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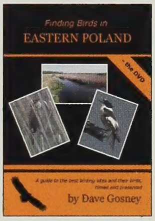

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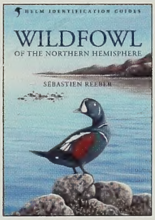

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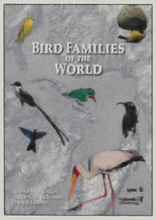

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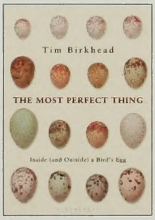

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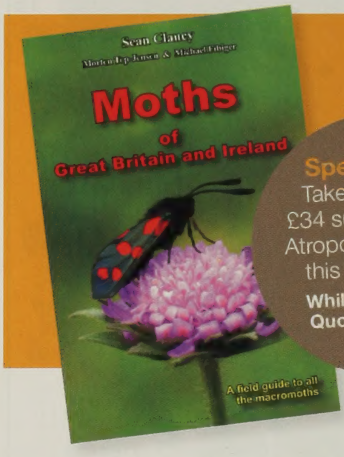
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